

# The Mining Journal

## RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 859--Vol. XXII.]

LONDON, SATURDAY, FEBRUARY 7, 1852.

[PRICE 6D.]

### ENCUMBERED ESTATES IN IRELAND.

**VALUABLE MINES TO BE DISPOSED OF.—TO BE SOLD.** On the 20th February, 1852, at Cork, the remaining portion of the FEE-SIMPLE ESTATES of R. H. H. Beecher, Esq., containing VALUABLE COPPER MINES, and presenting, from their possessing sea frontage, a most favourable opportunity for conducting the deep sea fisheries. Several valuable LODES OF COPPER have been laid open on these Estates, and are of great richness, and have been obtained. These MINES are most favourably situated, being close to excellent harbours, and having abundant water-power. These Estates and Royalties are well worthy the attention of Capitalists.

Full particulars and rentals, together with the reports of the mining engineers, may be obtained of Messrs. Fladgate, Young, and Jackson, solicitors, 12, Essex-street, Strand, London; or Messrs. Foots and Fitzsimons, 100, Abbey-street, Dublin; and at Cork.

**VERY IMPORTANT TO ENGINEERS, MACHINE MAKERS, MILLWRIGHTS, CONTRACTORS, MINERS, SMITHS, BROKERS, AND OTHERS.**

**MR. W. KIRK** most respectfully announces that he is honoured with instructions from Messrs. Jones and Potts, engineers, and proprietors of the extensive Works, known as the VIADUCT FOUNDRY, NEWTON, near WARRINGTON, who are declining business, to SELL by AUCTION, commencing on Monday, March 1, 1852, and continuing on each succeeding day of business (Saturdays excepted) until the whole is disposed of, the whole of their truly valuable PLANT, STEAM-ENGINES, TOOLS, MACHINERY, UTENSILS, and EFFECTS, consisting of one new six-wheeled locomotive engine, with 154-inch cylinder, 30-inch stroke, and 6-foot driving-wheels; the wheels are wrought-iron. One six-wheeled tender, with double break on each wheel, and tank containing 1230 gallons of water. One six-horse high-pressure table engine and boiler, by Jones and Potts. One rivetting machine, to cut its own rivets and make the same; will rivet a boiler 30 feet long, with driving apparatus. Four logs, with boarded sides, and roof-traversing carriage chains; blocks, &c., for the above. One machine for straightening and bending boiler plates. Bolts, 6 feet 6 inches long, 13 inches diameter, with driving apparatus, by Garrett and Moore. Thirty-six lathes of the most valuable and varied descriptions, including slide-lathe, back gear, compound slide, double wheel, hand and foot lathes, &c., by Whitworth, Collier, and others. Seventeen planing machines, of various sizes and descriptions, self-acting and otherwise, by Collier and others. Nine upright drilling machines, to fix against a wall or beam, single power head gearing, wall brackets, and driving apparatus. Two large upright drilling machines, to fix against a wall or beam, back geared; will bore a hole 4 inches diameter, with wall, brackets, and driving apparatus; one small ditto, for the like fixing, with trundle down motion, elevating table, screw and strap motion. One slotting machine, will slot 14 inches deep, will take in a wheel 5 feet 6 inches diameter, to screw from 4 to 1 inch. All the smiths and boiler makers' tools, turning tools, 135 vices, mandrills, stocks, taps, and dies; anvils, bellows, slack troughs, cranes, &c., &c., &c. All the new stores of bar and rod iron, steel files, &c.; cast and wrought metal, and about 30 tons of forged scrap; also one wood building complete, used as a joiners' shop, with blue slate roof, three pairs of folding doors, nine windows, and six skylights, 24 feet long, 12 yards wide, and 5 yards high; also one painters' shop, of wood; three windows, eight yards wide by four yards high; together with an immense assemblage of other valuable and miscellaneous effects, particulars of which will be fully set forth in descriptive catalogues, which are in course of preparation, and will be ready for distribution on the 14th February instant, and may be had at the offices of the Mining Journal, Fleet-street, London; at Midland Counties Herald office, Birmingham; at Leeds Mercury; at Liverpool Mercury; at Sheffield and Rotherham Independent; at Newcastle Journal; at the Works; and at the office of the Auctioneer, 24, Princess-street, Manchester; or will be sent by post on receipt of six stamps.

**SALE of the valuable ESTATE, WORKS and PREMISES, LAND, BUILDINGS, COTTAGES, GAS-HOUSE, STABLES, OUTBUILDINGS, GAS-WORKS and FITTINGS, and about 600 yards of RAILWAY, well-known as the VIADUCT FOUNDRY, adjoining and having a siding into the Liverpool line of the London and North-Western Railway, at Warrington Junction, Newton, near Warrington.**

**MR. W. KIRK** has the honour to announce that he will SELL, by AUCTION, pursuant to instructions received from Messrs. Jones and Potts, the owners, about the middle of March, 1852, on the premises of the works of the VIADUCT FOUNDRY, NEWTON, near WARRINGTON, subject to conditions as shall be produced, and in two lots—viz.:

**LOT I.**—All that valuable PLOT OF LAND, which is inclosed within the walls forming the spacious yard whereon the said works are erected, including all the substantially-built brick buildings constituting the various and extensive workshops, foundry, warehouses, counting-houses, offices, &c., the whole covering an area or plot of land of 3a. 3r. 17p. statute measure, and subject to a chief rent of £61 5s. 3d. per annum; with which it is determined to sell the following valuable items constituting fixtures—viz., all those two stationary engines of 20-horse power each, with boilers complete; the whole of the powerful gearing, main and line shafting, for working the machinery; fan, for blowing the smiths' fires, 45 smiters' hearths, with tuc-irons, troughs, and blast-pipes, large hooping furnace, three cupolas, three powerful sunk griststones, 32, 41, and 54 inches diameter respectively, together with the gas-works, fittings, &c., counting-houses, offices, store-room, and all the fixtures therein, dining room, stables, and provender-room; also about 600 yards of railway, inside and outside of works, three turntables, communicating with, and having a siding into, the Liverpool and Manchester Branch of the London and North-Western Railway.

**LOT II.**—All those SEVENTY-SEVEN newly-built COTTAGES, immediately adjoining the above works, and occupying a plot or parcel of land, 1a. 3a. 7r. statute measure, and producing a yearly rental of £530, and subject to a chief rent of £30 per ann. The whole is upon three leases for 999 years, each bearing date respectively, March 25th, 1849, January 27th, 1847, and December 26th, 1849.

This large and important estate forms, as a whole, one of the most valuable properties in the county; and while it is admirably adapted and arranged for its present purposes, would easily be converted into cotton works, or any other manufacturing business requiring extensive accommodation. It is situated about midway betwixt the two great cities of Liverpool and Manchester, in the heart of the coal districts of St. Helen's, Wigan, &c., and literally stands upon the most valuable line of railway in the United Kingdom—viz., the Liverpool and Manchester branch of the London and North-Western Railway.

The property may be viewed at any time prior to, and on the day of sale; and any further information in relation may be had on application at the offices of the auctioneer, 24, Princess-street, Manchester; or at the works, where plans of the whole may be seen.

**FOR SALE, EXTENSIVE AND VALUABLE WORKS,** Along with upwards of SIXTY THOUSAND TONS CALCINED IRON, and additional FIELD OF IRONSTONE, lately discovered.

**TO BE SOLD, BY PUBLIC ROUP,** within the Royal Exchange Sale Rooms, GLASGOW, on Wednesday, the 3d day of March next, at One o'clock in the afternoon (if not previously disposed of by private bargain), the

**BLAIR IRON WORKS,**

situated at DALRY, Ayrshire, consisting of FIVE BLAST-FURNACES, FOUNDRY, MANAGER and WORKMEN'S HOUSES, FITS, MACHINERY, and MALLEABLE IRON-WORKS, so far as erected, together with the MINERAL LEASES, and large STOCK OF IRONSTONE, all as formerly advertised.

Apply for further information to Mr. Brown, No. 35, St. Vincent's-place, Glasgow. Glasgow, January 21, 1852.

**TO CAPITALISTS.**

**WHEEL INDUSTRY TIN MINE, LYDFORD, DEVON.**—TWO THIRDS of this valuable TIN MINE, situated near PRINCE TOWN, DARTMOOR, TO BE SOLD, BY PRIVATE CONTRACT, which will pay the purchaser 450 per cent. per annum. This is no speculation, as there are 24 lodes already discovered, and wrought on in the soil, which is most extensive, being upwards of 14 miles in length, and 14 mile wide, containing a remarkable tract of rich tin ground. The soil is held for the remainder of a term of 21 years, commencing from the 20th July, 1851, from the Duchy of Cornwall. The dues 1-18th.

N.B.—The two original proprietors have divided upwards of £5000 worth of tin from this mine. The purchaser can have the custody of the deeds, on his entering into the usual covenant to produce the same.

To treat for the same, apply to Mr. H. Bickford, Prince Town, Devon.—Jan. 27, 1852.

**LEAD MINES TO LET—the FRON FOWNOG MINES,** in the parish of MOLD, in the county of FLINT.—These mines were, for a number of years, the most productive in this extensive and rich mining district, and yielding very considerable profits to the late company.

The prospects in the deepest part of the mines (which is only about 75 fathoms from surface) are considered highly encouraging for further development, and the proprietors are now prepared to treat liberally with any respectable party for the future working of the property. The mine is situated within a mile of the Mold Station of the Chester and Holyhead Railway.

Any necessary information may be obtained by application to Mr. Stephen Eddy, mine agent, Grassington, Yorkshire; or Mr. James Edwards, mine agent, Warr, near Mold.

**WHEEL SOPHIA, LEZANT, CORNWALL.—NOTICE.**—ALL PERSONS having any CLAIM on the adventurers of the above MINE for GOODS DELIVERED before the 25th of December, 1851, are requested to FORWARD their ACCOUNTS to ME, on or before the 16th February, 1852, in order that the same may be discharged prior to my resigning the office of purser; and all bills not forwarded to me before the above-mentioned day will not be attended to. All goods supplied since the said 25th of December, 1851, are to be charged to the "Committee Members' Arms, Belgrave-square, London."

DANIEL WARD, Purser. Uppaton, Milnes Abbot, near Tavistock, Feb. 4, 1852.

**MR. JAMES CROFTS, of 4, KING-STREET, CHEAPSIDE,** MINING BROKER, OFFERS his SERVICES for the PURCHASE or SALE of MINING SHARES of every description—BARRIS and FOREIGN—and not being a dealer, transacts business only for principals.

Hitherto Mr. Crofts has issued a Weekly List of Shares for Sale, but in consequence of his business having become of a more comprehensive character, the "List" will be discontinued. Mr. J. Crofts has also made arrangements with an eminent firm on the Stock Exchange to BUY or SELL, in each MINES as are there dealt in, and including all the GOLD MINES, without any addition to the commission charged by Stock Exchange brokers.

Office hours Ten to Five; Mining Exchange (Hall of Commerce), Twelve to Two. Mr. Crofts may be consulted on all matters connected with existing or projected mines, either personally or by letter.—February 6, 1852.

**MR. HOPKINS** begs to acquaint his Clients and the Mining Public, that his MINING RECORD OFFICE will be CLOSED until his RETURN to ENGLAND.

**MR. EVAN HOPKINS** is now in CORNWALL.

**MR. JOHN DAVIES, MINING SHAREBROKER,** No. 17, EXCHANGE-ALLEY NORTH, LIVERPOOL.

**MR. BELL WILLIAMS, MINE AGENT AND VIEWER,** No. 16, CASTLE-STREET, LIVERPOOL.

**MR. GEO. CARNE, DEALER IN STOCKS AND SHARES,** 28, THREADNEEDLE-STREET, LONDON.

**MR. JOSEPH J. REYNOLDS, SWORN BROKER,** No. 22, THREADNEEDLE-STREET, LONDON. BUSINESS transacted in GOVERNMENT STOCKS, RAILWAY AND MINING SHARES, &c.—Having been connected with the management of mines in the most productive districts of Cornwall upwards of 20 years, and being in daily communication with the most respectable mining agents in various parts of the kingdom, Mr. Reynolds is enabled to furnish such information to capitalists as may be relied on.

Mr. J. J. REYNOLDS has SHARES FOR SALE in the following MINES:—

Ally-Crib	Lovant	Trobery
Bodmin Consols	Molland	Trevilly
Black Craig	Mendip Hills	Trenault Quarry
Bargally	North Levant	Unity Consols
Carvannall	North Basset	West Alfred
Condurow	Rocks and Treverbyn	West Basset
Caradon Vale	Pendarves and St. Aubyn	West Phoenix
Carn Brea	Pendarves Consols	Wheal Gill
Cook's Kitchen	Silver Valley	Wheal Lavel
Daren	Sydney Goldolphin	Wheal Susan
East Black Craig	South Condurow	Wheal Golden
East Wheal Craighigh	South Phoenix	Wheal Lemon
Great Wheal Alfred	Stray Park	Wheal Margaret
Great Wheal Baddern	St. Agnes Beacon	Wheal Venton
Galt-y-Maen	Tremayne	Wheal Hamlyn
Great Sheba Consols	Temple Consols	Wheal Trowans

Shares in ANGO-CALIFORNIA, BRITISH AUSTRALIAN, GOLDEN MOUNTAIN, LINARES, MINES Bought and Sold, and information given respecting them. Country orders punctually attended to.—Feb. 6, 1852.

**MESSRS. FRANCIS & LIGHTOLLER, MINING AGENTS**

AND CIVIL ENGINEERS. OFFICE.—No. 34, EXCHANGE ARCADE, MANCHESTER.

Messrs. FRANCIS and LIGHTOLLER, may be CONSULTED by MINING COMPANIES or OTHER PARTIES requiring INSPECTIONS and REPORTS on MINES of every description, or by CAPITALISTS and OTHERS desirous of INVESTING their CAPITAL IN MINES or OTHER MINERAL PROPERTIES.

Statistics and other general information connected with Mines and the Mineral Districts given or obtained with the utmost dispatch.

Capt. Abraham Francis having had upwards of 30 years' experience in the practical management of mines, and reported on most of the principal ones in the United Kingdom, applicants may rest assured they will receive full and satisfactory information on matters connected with mining.

Arbitrators, and contractors for the erection of engines and every description of mining machinery.

**MESSRS. FRANCIS & CO.,** in order to avoid the complicated and indefinite system of CALLS for working or proving mines, consider that a better and more satisfactory one will be found in offering the public those chiefly in which the machinery and underground work required to bring them into a state of production has been completed and paid for.

In mines thus far advanced, it will be obvious that as there will be no risk, so there can be no necessity for calls—the speculative part of the adventure having been gone through; and in this way capitalists will be enabled to invest with the certainty of immediate returns.

Mr. MATTHEW FRANCIS takes leave to announce, that he has several THOUSANDS OF POUNDS WORTH OF SHARES TO DISPOSE OF, which, at the selling price, give a profit of from £20 to £40. Offices, No. 7, John-street, Adelphi, London.

**GENERAL MINING AND MINE REPORTING OFFICES,** 1, CROWN-COURT, THREADNEEDLE-STREET, CITY.

Messrs. M. FRANCIS & CO., MINING BROKERS, appreciating the desirability of PROVIDING the most AUTHENTIC INFORMATION respecting BRITISH & FOREIGN MINES for those who desire to INVEST SAFELY, have OPENED this OFFICE for the REGISTRATION AND CLASSIFICATION OF THE DIVIDEND-PROMISING AND WORKING MINES.

Their REGISTER will be found a VALUABLE INDICATOR, as, from more than twenty years' experience in the successful selection and management of mines, they can confidently advise, so as to insure the most certain and remunerative returns.

\* Shares Purchased and Sold—Mines Inspected, &c.

**JAMES S. TRIPP AND CO., MINING AGENTS,** LOMBARD-STREET CHAMBERS, CLEMENT'S-LANE, LOMBARD-STREET.

ESTABLISHED 1839.

\* Every information afforded, and business transacted upon the most liberal terms.

**MINING RECORD OFFICE, 26, AUSTIN-FRIARS, LONDON.**—MR. MANUEL'S OFFICES are expressly for the USE of COMMITTEES and COMPANIES conducting their BUSINESS in LONDON, and are entirely free from share-dealing. Mr. MANUEL will be happy to CONDUCT the LONDON AGENCY of any MINES now at work, or about to be worked, he having spacious and convenient OFFICES for that PURPOSE.—Terms on which the business is conducted to be had on application either by letter or in person.

Sixteen years' experience will enable Mr. Manuel to give suitable advice on all occasions.—Offices of the West Wheal Rose, West Callington, Busparva, Galt-y-Maen, Great Crinnis Consols, &c.

**MINING INVESTMENT.—T. FULLER and CO., No. 51, THREADNEEDLE-STREET, LONDON,** beg respectfully to inform the public that they are in a position to BUY and SELL in all DESCRIPTIONS of MINING PROPERTY, which will pay from 15 to 25 per cent. upon present purchase, and have specially FOR SALE—Bedford United, Devon Great Consols, Wheal Mary Ann, Trevelyan, West Caradon, Wheal Reeth, South Caradon, Tincroft, Trebarn, Butterdon, Boringdon Park, Wheal Venton, Wheal Franco, Treleigh Consols, Trevelyan Consols, Castle Dinas, Wheal Edward, Wheal Zion, and Wheal Surprise.—Also SHARES in the GOLD MINES of Australia and California.

Every information given, either personally or by letter.—Office hours, Ten to Four.

**MESSRS. MOLYNEUX and CO., 34, THREADNEEDLE-STREET, CITY, MINE and MINING AGENTS,** beg to state, that they have TAKEN AGENCIES, No. 10, BUCKINGHAM-STREET, ADELPHI, STRAND, for the SALE and PURCHASE of MINES and MINING SHARES, and the MANAGEMENT of MINING COMPANIES, and have constantly ON SALE SHARES in most of the DIVIDEND-PAYING and other PROSPEROUS MINES, which will insure to capitalists the safest and most unexceptionable investment.—Daily communication received from their agents in Cornwall, Devon, and Wales, and every information and advice given on all mining matters.—N.B. Office hours from Ten to Four o'clock.

Offices.—10, Buckingham-street, Adelphi, Strand, and 34, Threadneedle-street, City.

**MESSRS. TREDINNICK and CO., MINING, BANKING, INSURANCE, and GENERAL AGENTS,** continue to NEGOTIATE every description of BUSINESS connected with the ABOVE SECURITIES.—They have always ON SALE SHARES IN DIVIDEND MINES in Cornwall, Devon, and Wales, at prices yielding purchasers from 15 to 25 per cent. per annum upon market value.—Statistical and other information gratuitously upon application, and money advanced in anticipation of sales.—Agency Offices: No. 6, HAYMARKET, FALMOUTH, and 3, GEORGE-YARD, LOMBARD-STREET, LONDON.

\* Correspondence to be addressed to the Western Branch.

**GREGORY'S HOTEL, 29, CHEAPSIDE, LONDON.**—Bed, 1s. 6d.; Breakfast, 1s. 6d.; Servants, 9d. per day. Omnibuses to and from all the Railway Stations set down at the door.—Gentlemen connected with the MINING INTEREST are particularly invited to patronise this Hotel.

WILLIAM GREGORY, Proprietor.

**MR. T. P. THOMAS, MINE AGENT, 75, OLD BROAD-STREET.**—Established nine years.—Mr. T. P. THOMAS begs to inform capitalists and the public that he is at all times in a position to BUY or SELL, at close market prices, in dividend and respectably established BRITISH and FOREIGN MINES; and having a local knowledge of the principal Cornish and Welsh Mines, from periodical personal inspection, &c., will be happy to furnish information by post or otherwise.

N.B.—Mines inspected and reports furnished.

**MINING PROPERTY.—MR. HERRON** has SHARES in the best DIVIDEND-PAYING MINES FOR SALE, and which will give the purchaser 15 to 20 per cent. for the outlay. Amongst others are the following:—

Alfred Consols	North Basset	Wheal Margaret
Twinklsey and Barrier	Bedford United	Levant
East Wheal Rose	Wheal Seton	Wheal Mary Ann
West Caradon	South Frances	Bryntall
South Basset	Wheal Reeth	North Roakear

And has also FOR SALE SHARES in MINES having a PROMISING APPEARANCE, and affording greater range for speculation, such as—

Stray Park	Tywardreath	Treleigh
Trevelyan	Corn Bruno	North Downs
West Trowan	East Wheal Leisure	Tincroft
West Treasury		Tamar Consols

Mining Offices, 33, Clement's-lane, Lombard-street.

**LOSH, WILSON, and BELL, NEWCASTLE-ON-TYNE,** MANUFACTURERS OF BAR-IRON, RAILWAY BARS, FORGE and ENGINE WORK, CAST-IRON GOODS, and STEWART'S PATENT CAST-IRON GAS and WATER-PIPES. OFFICE.—7, SISE-LANE, LONDON.

**GOLDENHILL COBALT, NICKEL, COLOUR, and CHEMICAL WORKS, NEAR NEWCASTLE, STAFFORDSHIRE.** JOHN HENSHALL WILLIAMSON, MANUFACTURER and REFINER. Reference.—Professor Miller, King's College, London.

\* A QUANTITY OF BISMUTH TO DISPOSE OF.

**MR. ALFRED SENIOR MERRY, DEALER IN COBALT and NICKEL ORES, and ASSAYER in GENERAL.**—Address: LEE-CRESCENT, BIRMINGHAM.

**MR. THOMAS JORDAN, METAL BROKER,** No. 75, OLD BROAD-STREET, CITY, exclusive AGENT for one of the BEST MAKERS OF HAMMERED IRON, for MARINE, LOCOMOTIVE, and other ENGINES. Also AGENT for the SALE of SOUTH STAFFORDSHIRE and WELSH BAR, BOLT and BOILER PLATE IRON, in all its varieties. The Proprietors of Lead and Copper Mines in Devon, Cornwall, Wales, &c., will find great advantage in the quality and cheapness of the iron they require, by seeking quotations through the Advertiser.

**A CARD.—STEPHEN COX, MANUFACTURER of OIL** OF VITRIOL, SULPHURIC ACID, ROMAN VITRIOL, &c. NETHAM CHEMICAL WORKS, ST. GEORGE'S, NEAR BRISTOL. All Goods delivered in Bristol.—Prices and terms on application.

**ENCUMBERED ESTATES, IRELAND.**

**MR. AUSTIN, A.B.I., MINING ENGINEER,** begs to acquaint his Friends and Gentlemen interested in, or about to purchase, Estates in Ireland, that he will START on one of his PERIODICAL TOURS OF INSPECTION about the last week in February: his route will embrace the Southern, Western, and Eastern (gold) Mineral Districts. Those desirous of having ESTATES EXAMINED will please communicate by letter, addressed—No. 11, TRINITY-STREET, BATHISTOL.

**WEST OF ENGLAND AUSTRALIAN GOLD MINING COMPANY.**—In consequence of a meeting of many of the most influential men in Cornwall not being convened in sufficient time to bring out the prospectus on the 7th inst., the proprietors are compelled to DEFER IT FOR A FEW DAYS, when it will be laid before the public.

WARWICK A. HUNT, Sec. pro tem. 4, Frankfort-street, Plymouth. February 6, 1852.

**TO CORNISH MINERS.—WANTED, MINERS** to proceed to AUSTRALIA in the service of a GOLD MINING COMPANY. Wages, 20s. per month, commencing on reaching the mines. All expenses of passage, &c., will be paid by the company.

Copies of the stamped agreement, with full particulars, price 1s., either in money or stamps, will be forwarded post free by applying to Mr. H. Moreton, Chatham, Kent.

**CLERK.—A Young Man,** whose present engagement as Managing Clerk at a Colliery on the Tyne has nearly expired, is anxious to meet with a RE-ENGAGEMENT in the OFFICE of a MINING COMPANY. Most unexceptionable references as to character and ability will be given; also security, if required. Address "W. C.," Post-office, Hallowell, Northumberland.

**TO BE SOLD.—A NEW 36-inch cylinder STEAM-ENGINE,** complete, with main beam in two parts, 19-ton boiler, 200 lbs. steam, complete, in good condition, and of the best materials and manufacture: now lies at Devonport. All particulars may be had from Messrs. Durrant and Co., brokers, No. 59, Lombard-street, London.

**FOR SALE, CHEAP.—A 6-HORSE HIGH-PRESSURE** STEAM-ENGINE, cylinder 9 inches diameter, 22 inches stroke, fly-wheel 8 feet diameter, with new boiler. Also, FOUR PUMPS, complete, suitable for pumping water from excavations, cofferdams, &c. Apply by letter, post-paid, to "A.B.C.," Post-office, Cardiff.

**STEAM-ENGINES FOR SALE, of 6, 9, 12, 15, and 20-** horse power.—Apply to Burnett Brothers, Spring-gardens Engine-Works, Newcastle-on-Tyne.

**SILVER VALLEY and WHEAL BROTHERS MINING COMPANY.**—TO SILVER SMELTERS.—TENDERS will be RECEIVED at the Company's Offices for the PURCHASE of NINE TONS and upwards of SILVER ORE, samples of which may be had on application to Mr. Fry, at the mine, Callington, Cornwall. Net price, free of returning charges, required. By order.

3, Hatton-court, Treadneedle-street, Jan. 30, 1852. WILLIAM LEE, Secy.

**SILVER VALLEY and WHEAL BROTHERS MINING COMPANY.**—At a SPECIAL GENERAL MEETING of the registered shareholders of this Company, held on Friday, the 30th of January, 1852, it was unanimously Resolved,—That the capital of the Company, now represented by 10,000 shares, of £1 each, be reduced to 6200 shares, of £1 each—being the number now issued.

WILLIAM LEE, Secretary.

**FENTON POTTERY COAL and IRONSTONE MINING COMPANY.**—Notice is hereby given, that the FIRST HALF-YEARLY GENERAL MEETING of the proprietors of this Company will be HELD at the Storey-gate Tavern, Great George-street, in the City of Westminster, on Thursday, the 19th February, at One o'clock precisely, for the purpose of receiving the report and statement of accounts from the directors—of declaring a dividend for the half-year ending 31st Dec. 1851—to appoint one director, in the room of Mr. John Hamilton, retiring, and for the transaction of the ordinary business of the Company. THOS. WRIGHT, Chairman.

The register of transfers will be closed until after the meeting. 16, Queen-square, Westminster, Feb. 2, 1852. WM. FALK, Secretary.

**KENMARE and WEST OF IRELAND MINING COMPANY.**—Notice is hereby given, that the ORDINARY GENERAL MEETING of the above Company will be HELD at the Offices of the Company, No. 62, Moorgate-street, in the City of London, on Thursday, the 12th day of February next, at One o'clock precisely, to receive the Report of the Directors, and the half-year's accounts, to elect a director, in the room of Robert James Roy Campbell, Esq., who retires by rotation, and to consider the general affairs of the Company.

**THE OWLACOMBE BEAM and UNION TIN and COPPER MINING COMPANY, DEVONSHIRE.**—The Committee of Management of these Mines give Notice to the shareholders therein, that a SPECIAL GENERAL MEETING will be HELD on the 17th of February inst., at Twelve o'clock precisely, at the Offices, 75, Cornhill, London, to determine whether the undertaking shall be further prosecuted or abandoned.

ROBERT HUNT, Secretary.

**TO THE SHAREHOLDERS in THE WORTHING MINING COMPANY.**—An EXTRAORDINARY GENERAL MEETING of the shareholders of this Company will be held at No. 20, St. Helen's-place, Bishopsgate-street, in the City of London, on Wednesday, the 26th day of February, 1852, at Three o'clock in the afternoon precisely, to receive a report from the Directors as to the proceedings of the Company since June last.

(Signed) DAVID HALKETT, Chairman. 20, St. Helen's-place, Feb. 5, 1852. HENRY PEET, Secretary.

**STIRLING'S PATENT YELLOW METALS.**—Adapted for SHEATHING, BOLT STAVES, BOVE NAILS, DECK NAILS, as reported on by the late Mr. Owen, Supervisor of Metals to the Admiralty; also for PROPELLERS, FRAMEWORK SCREWS, PISTONS, CYLINDERS, COCKS (particularly where there is exposure to corrosion), RAILWAY CARRIAGE AXLE BEARINGS, and for all machinery subject to friction.

Messrs. JOHNSON, 166, Buchanan-street, Glasgow. Applications for licenses and other information to be addressed to the undersigned.

ALFRED BARRETT, Bishopsgate Foundry, Skinner's-lane.



## Original Correspondence.

## SOCIETY FOR PREVENTING LOSS OF LIFE IN COLLIERIES.

Sir,—The proposition of Mr. Goldworthy Gurney, mentioned in your last Journal, to establish a society for preventing the loss of life in collieries, is well worth the serious consideration of not only those who are engaged in coal-mining, but also of the numerous philanthropic persons who, in common with Mr. Gurney, are actuated by interested and earnest desires to better the condition of the miners. The greatest difficulty to be encountered in devising remedies for the existing evils is the absence of exact statistical data; and that which exists pertains principally to the northern district, and is in a great measure inapplicable to other coal-fields, in which different systems of working the coal is pursued. The parliamentary and Government reports, doubtless, contain much that is valuable, but are deficient in information of those details which are essential to a full development of the subject, and without a knowledge of which it is impossible to suggest a true practical remedy. It is to be hoped that much of this required information will be given in the promised reports of the Government inspectors of mines; and that these gentlemen will not content themselves by merely giving vague generalities, but give us correct figures for the opinions they may have formed of the states of the mines they have visited. The inspectors will, of course, have recourse to instrumental aid in examining mines; and, therefore, the publication of their observations in a tabular form will be attended with but little trouble and expense—while the information thus communicated would have as important and eventual a tendency to diminish the number of accidents as inspection itself. Presuming that this reasonable anticipation will be realized (and if it be not, it will give rise to a general and great disappointment), a society like that proposed by Mr. Gurney would be of great service, by encouraging the suggestions of remedies, deciding on their theoretical and practical value, and aiding the diffusion of a knowledge of them; but if the society has to undertake the Herculean task of collecting data from all the 12 or 13 coal districts in Great Britain, it will require such large pecuniary means as to render the accomplishment of its object hopeless. It is well known that a society for preventing accidents in coal mines was instituted at Sunderland in the year 1813, which was supported by voluntary subscriptions, and offered premiums for the discovery of new and better methods of lighting and ventilating collieries; and yet, notwithstanding the labours of this society were rewarded by the brilliant discoveries of Dr. Clanny, G. Stephenson, and Sir H. Davy, its historian tells us "that this philanthropic society did not receive that zealous support from the coalowners and viewers which the public anticipated;" and that its funds remained at so low an ebb, that it soon dwindled and died away. In 1839, the celebrated South Shields' Committee was instituted, and produced a report of great practical value. Whether it is now in existence is a matter of doubt, although the philanthropic exertions of its able secretary (Mr. Mather) are never wanting when the cause of humanity requires his disinterested services to alleviate the evils to which the miner is subject. As far, then, as experience goes, the longevity of the society proposed by Mr. Gurney cannot be anticipated, if its existence is to depend on large funds raised by voluntary subscriptions; and the best security for its permanency will be in a small expenditure, and a corresponding limitation of its operations. Yet the design is so really and intrinsically good, that it is well worth an effort; and the success which it deserves would be essentially promoted by preliminary communications with the Government, so as to ascertain how far the society may rely on the assistance of the inspectors in furnishing the requisite statistical information. In the meantime, it may be observed that this subject has claimed, and continues to receive, great attention from the Institution of Civil Engineers; and that, during the last five years, scarcely a session has passed without a paper being read upon it, eliciting lengthened discussions and much valuable information. Papers are received and read which are written by persons unconnected with the institution; and admission to its meetings is easily obtained on application to the members, associates, or secretary; and strangers are welcomed to take part in the discussions. But a society exclusively devoted to the prevention of loss of life in mines would more effectually promote the object contemplated by Mr. Gurney, and best serve not only the interests of humanity, but the prosperity of the "coal trade;" and it is to be hoped that this additional instance of his disinterested exertions to save human lives will be properly appreciated, and promptly responded to, by all who can promote the object contemplated.—J. RICHARDSON, C.E.: *Neath, Feb. 2.*

## NEW BRITISH IRON COMPANY.

Sir,—I perceive in your paper of 31st Jan., an article on the affairs of the New British Iron Company, and in the course of it an erroneous statement is made, which, in justice to all concerned, I feel bound to correct. You say, "we understand their collieries in Staffordshire are in a most deplorable condition." Now this is certainly not true; and so much is it the reverse of the fact, that I can safely say if the prosperity of the company depends on the position and prospects of the principal parts of their collieries in Staffordshire, they have no cause to fear. As you are ever ready to correct such errors as the one now alluded to, I trust you will allow this to appear in your next. *George Thomson, Manager.*

*Corngreaves, Feb. 4.*

## THE COST-BOOK.

Sir,—I suppose that our friend, "Argus," does not dissent from my views so far—in point of fact, he could hardly do so; for the only part of his definition I directly dispute, the liability of the partners "for the whole debts of the partnership," is expressly decided in my favour, by the case of *Ricketts v. Bennett* (17 L. J. c. 17), which distinctly enunciates the doctrine that no partner is liable for the debts incurred by others without his consent. This case is only another phase of the principle that prevailed at the time of the ruling in *Vice v. Anson*, which various side-winded attempts had been intermediately made to supersede, with the view of supplanting mining customs, by the common law. However, those exceptional cases may be said to be now over-ruled by Lord Truro, as Chief Justice of the Common Pleas, whose eminence as a common law judge no one can dispute.

We now pass to the consideration of scrip companies. What is scrip? It is the certificate or representation of a defined pecuniary capital payable by instalments, which certificate is inscribed with the particulars of the instalments as paid (hence the name), and becomes convertible into a share certificate when the whole capital is paid up. There is thus an essential difference from the true cost-book certificate, which some persons confound with scrip. The cost-book share certificate is a mere voucher of the interest in the adventure, which may, or may not, pass any actual estate (practically, for convenience of transfer, it never does), but which gives, at the least, an equitable interest or representation in the "adventure and its products," and not in any capital stock, which is the virtual investment in railway and other joint-stock companies. The legal distinction is clear and intelligible. In cost-book companies each shareholder is a *cestui qui trust* of the persons who hold the legal estate, taking an equitable interest only, which amounts to a *quasi* tenancy in common; and, therefore, he cannot legally be bound by any act of his associates to which he does not give an express sanction. It is quite different in other companies, even those having as the basis of operations real estate, such as railways. And here, *en passant*, let me notice a case in which it was attempted to be established, erroneously, as I presume to think, that shareholders had a direct interest in the real estate of a railway company. Their sole interest is in the capital, and it is only incidentally and indirectly that the real estate attaches itself to that interest. The actual *cestui qui trust* in this case are the board of directors, in whom the entire interest of the company is officially vested by delegation from the constituents. Consequently the shareholders in a railway company have positively nothing to say to the real estate, save by their control over the board. Herein will be observed the natural line of demarcation between the Cost-book System, and the constitution of such a company, where the rights and authorities of the partners, in respect to property the subject of the enterprise, are transferred absolutely or under limitation; whilst under the cost-book, the body of associates at large compose the administrative power. And, again, as to the right of individual members or officers to pledge the credit of their co-partners or employers, it is clear that the cases which have been set up to establish such a principle with regard to cost-book companies have not been well considered, nor do they show a careful enquiry into the nature of the "principle;" because the cost-book, as a mining custom, apparently emanating from the Roman law, or perhaps some more ancient type or analogy of that jurisprudence, is manifestly opposed to the common law of England, in this particular.

These considerations naturally point out the irreconcilable absurdity of forming a cost-book company and representing the interest of the constituent members by a pecuniary capital, divided into shares, bearing on them the interest of an ostensible monetary value in proportion to the amount paid up. Of such shares or scrip certificates are only the preliminary substitute, till the whole of the capital stated on the share is paid up. By this I do not intend to convey that it is inadmissible to give in the cost-book certificate a statement of the amount upon the partner's share of the adventure, in the nature of a memorandum of the amount paid up. On the contrary, I think that, and every

other principal fact, such as the special conditions of the cost-book, should be succinctly shown on the face of that document, which is a truth, the evidence of title to each share. Between these two forms of certificate there is a broad and insuperable barrier; to transgress this rule, by giving to a nominal cost-book the form of a share referring to any capital stock, and by showing the aliquot contribution to such capital, would clearly vitiate the whole constitution; and, by that departure from the principle of law which governs the "custom of miners," as an exception in favour of mining industry, the company would fall within the scope of the 7 and 8 Vic. cap. 110, and be subject to the penalties for non-registration.

Our next point in the *seriatim* discussion of the definition will be "the cost-book" itself, the form and effect of its provision; but it is to be hoped that some of our Solons will now take the matter in hand, and bring in a bill to regulate and encourage our mining associations. Still it is to be hoped that anything that may be done in this regard will be more maturely considered than the Report of the Committee on Partnership, who appear to have been in part ignorant of the combinations in the subject on which they pretended to adjudicate.—JURISCONSULTS: *Feb. 4.*

## WEST WHEEL RUSSELL MINING COMPANY.

Sir,—The first annual meeting of this highly-promising company took place on Friday last, as reported in your columns of the day following, and I cannot refrain from comparing the result of 16 months' outlay, the work really performed in that time, and the present position of its financial affairs, challenging you to show any other, among the scores around, that have progressed in a similar way. This mine was set to work on a legitimate footing—no premium was exacted—all came in upon equal terms as shareholders; even the committee act gratuitously. The outlay (1540*l.* 19*s.* 1*d.*) has been judiciously expended, and there has been no jobbing in shares encouraged; the present market value of them proves the fact.

Compare this concern, as it really stands at this moment, and you will find that some scores of others not many miles off, which have been longer before the public, have expended considerably more money, and are not half the depth, have not one-fourth of the levels extended, and yet are bolstered up, more for the purpose of gambling transactions in the share market than for the prosecution of legitimate mining, actually standing at many hundred per cent. premium. I am no shareholder in either of them, though well acquainted with their locality, and am prompted to write this, solely to prove that I can as readily bestow praise as inflict censure—the former being a more pleasing duty, when it comes deservedly under the notice of ARGUS (of Truro). *Feb. 3.*

## UNITED MEXICAN MINING ASSOCIATION.

Sir,—Having attended the half-yearly meeting on Wednesday last, I was highly pleased to see so respectable and numerous a body of proprietors present; and although strongly on the side of those who wished to have the committee of five appointed, and still remaining of opinion that it would be most satisfactory to the majority of the shareholders, I beg most distinctly to state that so far from this being intended as doubting the judgment or condemning the acts of our honourable board, it would only tend to prove to the proprietors generally that the board has done the best for the interest of the company during the long period they have been in office. Large as the number of gentlemen present were, it should be taken into consideration that they in reality only represented one-tenth of the proprietors, and the shares voting less than one-eighth of the number distributed. Many of the absent holders reside at a considerable distance, and have no means of knowing the progress making, except by reading the monthly reports in the *Mining Journal*, the half-yearly financial statements therein, or the condensed particulars that, perhaps, twice a year appear in two or three other newspapers.

Now, if parties actually at the meeting on Wednesday, entitled to 43 votes out of 113, after seeing the report and documents, and hearing all that then occupied four hours in discussion, stood firm in opinion that such a committee was necessary, the impression on my mind is that the proprietors of seven-eighths of the shares not present, on reading the faithful report given in the *Mining Journal* of Saturday, will be for the appointment of such a committee, and not be satisfied without, especially, finding as they will, that the honourable chairman and his colleagues had not the least objection to it. It is in the power of such shareholders to have one even now; they have only to get up a requisition to the board, call a meeting specially for the further consideration of the subject, and they may rely on the cordial co-operation of the 1981 shares, entitled to 43 votes. The packet from Mexico will have arrived with later advices in the interim, and Messrs. Legg, Weston, and Anderson (to whom we are already indebted) will, doubtless, have elicited much more real information, according to the chairman's polite request that they would attend at the office: "there were no secrets; if any proprietor wished to see any document, book, or paper, the accountant would attend by day or night, until he or they expressed themselves satisfied."

I hope those three gentlemen will make a point of going together to the office for the purpose, and if they express themselves satisfied, I think the shareholders may be so, but I know they would naturally prefer a committee of five, duly appointed; I, therefore, beg thus publicly to throw out this suggestion for the consideration of those shareholders who reside at a distance. Let there be such a committee; there is not the least objection to it, and that it is most desirable, and for the benefit of one and all, I will now further attempt to show.

Our manager, Capt. Farrell, till within the last 10 months was connected with the artillery, and knew nothing about mining tactics. This is admitted; we are told Mr. Parkman is the miner; what has he done to prove his talent in such a capacity? where got he his mining experience? I am fully as strenuous an advocate as Mr. Legg, that a mine manager should be a man experienced in mining and geology. Is Mr. Parkman perfectly qualified in these respects? My own experience tells me he is not; the buscones being called in so recently tends to prove it. He worked on at a weekly loss, they immediately made large weekly profits. He contends that La Luz vein "drives beyond the territorial possessions of the company," whilst an English gentleman, long resident in Mexico, "a very skilful miner, who combines local knowledge with much experience in mining," is so confident that it does, that he actually engages to furnish the means of proving it and working it at his individual cost, and less if unsuccessful, sharing one-half the profit with the company if he succeeds. Should the latter prove the fact, will not the shareholders say with Mr. Legg, myself, and others, Your managers are neither miners or geologists—they ought to have been so; and when they see one-half the profits actually thrown away by means of their want of such judgment, and only hasty and inconsiderate acts carried out on the impulse of the moment by them, will they not say the sooner a change takes place the better. From long experience in mining affairs, I see plainly enough that Mr. Parkman collects the information he furnishes from the underground agents at the various stations; his monthly report should be accompanied by certified copies of what he obtains from the practicals. We should not then have to wholly rely upon his theoretical views; and if they occasionally sent us a sketch of the underground workings, we should know as well as Mr. Parkman whether there was any probability of La Luz vein diverging out of the territory, or otherwise. A committee would enquire into all these matters, and their suggestions receive the due consideration of the board, who we are well assured have, with their own interest, the welfare of the concern at heart. Whether we work by buscones or not, a vast deal depends on the talent, experience, and watchful care of the underground agents. The buscones are simply tributaries, and all acquainted with mining know that as soon as labour ceases, and mines are wrought by tributaries alone, it is the first step to abandonment. Such is the precise condition we are in at Rayas, "now exclusively worked by buscones since the month of August, the debt due to the association on the 31st October being \$248,338*l.*" It is only natural to conclude that the moment the buscones are told to go to work they select the richest portion of the lodes, branches, and arches of mineralised ground left standing, following it upwards or downwards as it may seem most remunerative to them; the consequence is, in nine cases out of ten, that they do better (as in our case) in the first month than those that follow, unless they meet with some unexpected rich bunch in the course of beating away the lode or arches left. This mode of working, however, must come to an end; and when they have "dug out the eyes" and "taken away the nest egg," finding nothing remunerative, they quit the mine to seek labour that will be more profitable to them.

The mine of Rayas, if given up on the 31st December (which the next mail may announce) will stand indebted to the company nearly 50,000*l.* sterling, receivable out of the profits when worked by any other party—this may not occur for a long while. Should the term be renewed to the association, it will entail an additional outlay in the opening of ground by men on tutwork, and, therefore, requires due consideration on all sides, not only as to the mode recommended by practical agents in Mexico, but the board here, and the proprietors generally, for it is not likely to be done without another pull on the purse strings.

The new mines have also taken a very large sum, and there does not as yet appear any immediate prospect of either of them paying their own current expenses. To the 31st October they stood indebted to the association about \$283,673*l.*; Aldana, nearly \$100,000, then working only "with the strictest requirements of the mining laws, and the stipulated minimum of labour, with no present advantage." A committee would elicit whether there was any prospective advantage likely to result; if not, and their opinion coincided with that of the board, the sooner it is suspended the better. At La Trinidad, similar labour only is bestowed at present, the debt being under \$30,000*l.* "The valuable and highly-prized La Luz vein" either does or does not pass through this territory, and it will be for the advantage of the association to incur the expense of proving this, or allowing others to do so, receiving one-half the profits. The mine was taken in the full expectation that the vein did pass through it, and one way or the other it should be ascertained, rather than be left longer enveloped in "much doubt and anxiety," as stated in the report.

The mine of Jesus Maria has incurred an outlay of \$6,000*l.* and is down 107 varas, the veins increasing in size as they get deeper. From San Ricardo and San Pablo four distinct points simultaneously will test the vein to the entire depth of the shaft. Surely such an object should be obtained with the least possible delay. At Mina Grande, the operations at the bottom of San Jose shaft warrant further prosecution; the debt at present is about \$25,000*l.* More outlay in these may be judiciously expended. The Zacatecas claims, haciendas purchase of quicksilver, together with the general affairs of the association, cannot receive any injury by the appointment of a committee; on the contrary, their report would tend to confirm the confidence the shareholders have ever entertained, and assist in keeping them both pacified and satisfied, until the period arrives when they may hear of a dividend.

Were I to enlarge further, it would be as to the financial account: the amount charged for salaries and wages, rent and taxes, coal, oil, &c., with the repairs of house, appear exorbitant, and probably a saving worth notice might be made in this respect. As these accounts are by this time in the hands of every shareholder,

according to the resolution come to, you will, in all probability, receive communications from many other quarters upon this subject. Allow me, therefore, to conclude this by stating that I, for one, do not for a moment impugn the conduct of those who have had the direction of our affairs. Still, I cannot entertain a doubt but that the appointment of a committee would have terminated favourably for the interest of all concerned.—NUNZ: *Islington, Feb. 4.*

## THE DRAKE WALLS MINING COMPANY.

Sir,—After seven years' prosecution of this adventure, we have arrived at the enviable position of being placed amongst the dividend-paying mines; and really, from the reports presented to us by our respected chairman, by Mr. Johnson, and Capt. W. Webb, our agent, we may reasonably calculate upon a continuance, while the price of tin keeps as it now is.

I am fully aware that we should have received dividends sooner but for two reasons. The first was the low rate of our produce, owing to a mixture of wolfram in it. The second, the unremunerative price of tin generally. We have got rid of the first, and have now to hope that the present steady demand will enable the smelters to have more consideration for us, and give a fair value for our produce.

During the last year, the mine has considerably improved, and is now in regular working order above and below. More machinery and stores having during that period been supplied, we may assume that the property is in an effective state of working. In the western part we shall reach the 80 fathom level in the course of a month, and increase the returns from that quarter; but to our prospects east I look with most confidence; the ore is evidently dipping eastward. The 60 fm. level will be communicated with the footway shaft very shortly—say, three months; and then we shall be able to step a long run of tinny ground standing in the back of the level. The ground in these levels has changed into a beautiful light kilias—the ore looking well in the bottoms, which is all in whole, but too far from the pump to have expedited the sinking our other shafts with the speed we could wish. The new wheel will, however, conquer this; and we shall by its means sink Mathew's shaft, which is 120 fms. east, and thus have two sump-shafts—one east, the other west. Mathew's shaft could not be placed in a better position than it is; and by the 1st of May I expect it will be down to the 50 fm. level. If so, by Midsummer we shall reach in all probability the 60. In conclusion, I would invite inspection of the surface plan now at Salvador House, showing the locality of the property and the numerous parallel lodes in the adjoining sets, more particularly to the southward, fully persuaded that, if they are spiritedly prosecuted in depth, they will be found to amply repay the shareholders, and prove this to be one of the best districts in the eastern part of Cornwall. *S. S. S.*

## WHEEL MARY EMMA.

Sir,—In answer to your remarks about Capt. Heath's claims on this mine during my purchase, allow me to inform you that he was the registered proprietor of about 60 shares in the mine; and when calls were made, his salary was retained in hand towards the liquidation of them. Capt. Heath having sold some shares, says the purchaser should be charged with the calls then due, which the purchaser denies. Be that as it may, it should be settled between themselves, and without expecting the purser to entangle the affairs of the company by interfering in such disputes. A purser can only look for payment of calls to those whose names appear in the cost-book at the time they are made. Capt. Heath having nominated in writing a referee, and agreed to be bound by his decision, should do so, without making use of your *Journal* in endeavouring to coerce the adventurers to pay unjust demands. *J. DIAMOND.*

*London, Feb. 5.*

## WHEEL WREY CONSOLS.

Sir,—In your *Journal* of Saturday last, I find my name coupled with a report from this mine. The assays for lead and silver are correct, but the price per ton quite incorrect. I would recommend the party first to go into calculations before placing figures at random. *J. JENKIN.*

*Assay-office, Callington, Feb. 4.*

## MUSEUM OF PRACTICAL GEOLOGY.

Sir,—Business having called me to London, I availed myself of the opportunity of attending several lectures delivered at the lecture-room of the Museum by Drs. Forbes and Percy, and Messrs. Hunt, Smyth, and others; and I am prepared to speak as to their truly practical character. I feel glad that the gentlemen constituting the staff of the institution have a field for the exercise of their distinguished talents, and that the British Government have so far displayed their wisdom in fostering science as to provide the needful machinery for imparting knowledge in the various branches of science there taught. It must be confessed that, while millions of the public money have been wasted in various unprofitable directions by successive Governments, they were not very ready to provide a few thousands in the way of scientific education.

Now, however, that they have provided convenient premises, and have an accumulating museum and experimental apparatus, it is hoped and believed that this institution will rapidly prosper, and that the benefits will be developed in the superior manner in which mine agents instructed here will conduct mining operations. I am sure that the lectures are of the right sort, and are so frequent that the lecturers are no sinecurists; they work hard for their salaries. The Mining Record Office is a very important department of the institution. Of this Mr. Hunt is the keeper; and he has engaged a surveyor to furnish copies of the plans and sections of mines. These copies, like everything else at the institution, will be open to free public inspection. This is the best public institution in the metropolis, because it furnishes living instruction, with appropriate illustrations, in all the essentials of a mining education. There are I find several pupils who attend the lectures, which are also attended by several of the fair sex, who regularly take notes. *JOHN BULL.*

*Little Britain, Feb. 3.*

## GOLD REDUCTION.

Sir,—In these days of gold, or golden days, when schemes are rife for gold mining and gold reduction, and companies for these purposes are starting up on all sides, we need not be surprised that some excitement should be caused by the announcement of a patent process which is to supersede all the old-fashioned modes of crushing and amalgamating, and to "astonish" the rocks, as well as the world. Of course everybody is conjecturing how Mr. Longmaid effects his object: some supposing that it may be by solution in a new solvent or combination of acids; others, that it is a revival of an old plan of plunging red hot quartz into water; and others, that it is by melting in pots with a new flux. Whatever the process may be, however, and until properly tested, we may be allowed to doubt whether practically and economically it will be found more advantageous than crushing, and washing and then melting down, as of old; nevertheless, we may wish it success.—P.: *Feb. 3.*

## LITERARY NOTICES.

*The City Smoke Prevention Act, with Suggestions on the Use of Smoke-Consuming Furnaces.* By W. KELD WHYTEHEAD, C.E. London: Weale, High-Holborn.

This pamphlet its author professes to be "a selection of hints from his notebook—the result of 12 years' practical experience;" it will, therefore, be read by many now the City Sewers' Amendment Act is empowered to enforce observance of its smoke-prevention clause, in hopes of obtaining sound practical information. In his second chapter, on the "Causes of the Production of Opaque Smoke," Mr. Whythead at once displays his incapacity to treat the subject chemically. He there speaks of the "imperfect combustion of the fuel"—coal—as the occasion of black smoke; and proceeds to assert, what engineers say, that "a square foot of fire-grate will only burn to advantage 10 lbs. of coal per hour." Mr. Whythead here confuses and entirely loses sight of two important facts—the difference between the solid and the gaseous fuel, and between the air supplied to the former and the air supplied to the latter. Having once plunged into this slough of error, so common among mechanical engineers, we are prepared to hear any extravagance of reasoning without being directed to the truth. Thus he says—"1 lb. of coal requires 2 lbs. of oxygen for its perfect combustion; to supply which, 150 cubic feet of atmospheric air must be passed through the fire." Now, all this air has to pass through the spaces between the fire-bars, affording a very limited air-passage. The reader, naturally considering this to be the very root of the evil, enquires for a remedy, which, in chapter 3, seems to present itself, as we have there "Plans depending on the Admission of Air to the Furnace." This plurality of plans consists of Mr. C. W. Williams' "Argand furnace," and Chanter's "movable fire-bar." What the latter has to do with the subject, more than any other movable grate, is difficult to divine; and, surely, Mr. Whythead ought to know that the alternate raising and lowering of fire-bars, either by levers or eccentrics, rides all the small coal into the ash-pit. How he can recommend such wasteful methods is somewhat surprising. The Argand furnace is an air-supplying and air-distributing furnace, and seems fully to provide the great desideratum pointed out in the former chapter, but is only introduced, not to recommend it, but to prove its fallacies. Its name is as much due to this furnace as to a common grate on Mr. Whythead's showing, because in an "Argand" lamp the "air is admitted through the flame." This may be Mr. Whythead's mechanical view of an "Argand" lamp, but we are quite at issue with him! Does the smoke, then, from a chimney go straight up the bricks, or do the bricks merely surround the smoke? In an Argand oil lamp, or gas lamp, we have a mere sheet of flame, which, whether the wick be straight or circular, answers the same end; in short, whether gas be burnt from a straight slot—or, from the same turned to a circle, O, there is no passing of the air "through the flame." The simple fact is, that in either case, the gas being spread out, offers a larger surface to the air, effecting quick distribution and admixture with the atmospheric oxygen. When he mistakes so egregiously the action of this lamp, it is not surprising to find him mistaking the construction of the furnace as "a row of perforated pipes at the back of the fire." From a practical gentleman of 12 years' experience, we should have looked for a description less calculated to misguide the public. In all the descriptions we have seen of the Argand furnace—the arrangement of which has been fully discussed in the *Mining Journal* of some years past—we never met with this novelty in its construction. The principle of the Argand furnace is the supplying of air to the gaseous products of the solid fuel, which Mr. Whythead himself labours to prove cannot be obtained through the fire-bars. Mr. Williams with this view, therefore, supplies the air independent of the ash pit, in front of the furnace, at the roof, or sides, or bridge, or flame bed, or wherever it is required, in small jets or flues, by which means a large body of crude coal-gas becomes immediately combined with air, is rendered instantly inflammable, and is burnt without the evolution of smoke. Mr. Williams goes on the broad principle of diffusing the air over which he thus obtains control, among



large volume of gas over which he has no control, irrespective of the particular size of the air-distributing apparatus, and contrary to Mr. Whythead, who will have it exactly "at the back of the fire." Walmsley's self-feeding apparatus is described, but its patent never named. Its coal distributing discs are represented as being "at a slight elevation above the bars," which is quite erroneous—their place being not backward, but forward, above the dead plate. Mr. Walmsley's moveable furnace is charily praised; but, says Mr. Whythead, "Candour compels us to add, that it is expensive, complicated, and very liable to derangement." Hall's patent moveable fire bar is recommended, though subject to the usual waste by sifting the slack into the ash-pit. Godson's furnace is feebly praised; it is never noticed that it will only answer for very slow firing. We have looked in vain for the promised "12 years' practical experience;" for, certainly, a more judicious, judicious summary of this important subject we have never seen, arising, in our opinion, from too common failing of not uniting the requisite chemical knowledge with mechanical skill, to work out to advantage those mechanical arrangements which favour and promote the wise and well-arranged operations of Nature, which guided work wonders, but opposed, present ungovernable obstacles.

## CARSONS CREEK CONSOLIDATED MINING COMPANY.—Capital £410,000, of which £220,000 is held by the Californian proprietors, and the remainder is to be allotted to the public, in shares of £1 each, payable upon allotment.

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SECRETARY—Mr. Henry Nesbitt.

**OFFICES OF THE COMPANY.**—Allhallows Chambers, Lombard Street.

Carsons Creek Gold Mine stands pre-eminent as the richest gold mine in California, and is probably the richest in the world. This mine was discovered by Mr. Wm. Hance, who, associated with others, obtained an exclusive and freehold title to it. The Association thus formed consisted of seven persons, who constituted themselves into a Company under the above title, and two of whom, Mr. W. Hance and Hon. D. W. Murphy (late Member of the Legislature of California, and Chairman of the Ways and Means Committee of that State), are now in this country. The opening of the mine in 1850 disclosed a richness of ore exceeding in value anything known in California.

The Company have, therefore, chiefly directed their efforts to mining and bringing to the surface the rude ore, waiting until arrangements could be made in Europe for procuring machinery for crushing it and extracting the metal. Already, however, in the progress of their labour, they have struck pockets in which the ore had become so enlarged and diffused through the whole mass of rock, that in one day or to the value of £30,000 was extracted, of such richness as to require only the use of the smelting furnace, the quartz rock constituting but a small per centage on the whole mass; while a succession of these masses, of variable richness, connected by a well-defined vein, occurred at different depths.

Accumulations of ore subsequently extracted are now lying at surface, which have been estimated, on a moderate computation, to yield upwards of £200,000 sterling. In pursuance of the arrangements of the Company, Mr. Hance, the President, and the Hon. D. W. Murphy, have arrived in this country for the purpose of enlarging the basis of the Company, and securing the machinery and means by which the wealth of the mine can be most effectually realised.

The credentials brought by these gentlemen led to negotiations, which have resulted in an agreement by which the company admit English shareholders to an equal partnership in the entire property and rights of the company on the following conditions—that is to say: That £210,000, a moiety of the whole capital, shall be raised by the English shareholders, of which the sum of £140,000 shall be paid as the purchase money for such participation in the property, and the further sum of £70,000, balance of the amount for English appropriation, shall be expended in machinery, and otherwise for the general purposes of the Company. Under this arrangement, the mine, buildings, land, stock, &c., now vested in the Company, as well as the £200,000 worth of ore, now lying quarried on the mine, become the property of the extended Company, and the management of the Company is vested in the English Directors.

Mr. Hance and Mr. Murphy propose that no portion of the purchase money shall be paid for five months, an interval aimed for the express purpose of enabling the several statements made with reference to the mine to be formally reported on and fully verified by the written reports of agents, to be selected by the English Directors. This arrangement, which it is intended to carry out with the least possible delay, must inspire confidence in the bona fide character of the Company.

The Directors think it fair to state, for the information of the public, that they have had communications from persons of influence in New York, establishing the fact that the Carsons Creek Mine is there considered as a certain and by far the most productive gold mine investment in California.

The following is a brief description of the locality and works of the mine:—It is situated in the County of Calaveras, in the State of California, near Carsons Creek, which runs into the Stanislaus River, the latter affording a water-carriage communication to Stockton, distant about 50 miles from the mine. From Stockton there is steam-boat communication to San Francisco. The property consists of three locations: the mountain location, on the crest of the lofty clay-slate range, above Carsons Creek, where the mine is working, consisting of a ledge of auriferous quartz rock, covering an area of 1762 feet in length, by a breadth varying from 5 to 25 feet, in which veins of gold are visible to the naked eye; a location on the Stanislaus River, which is highly important for the purposes of the Company, as affording abundance of timber and an unfailing supply of water-power; and a location on Carsons Creek, highly valuable as a site for the erection of machinery for the purposes of the mine.

The great elevation at which the gold quartz is found in the mountain location overbates the inconveniences which have been experienced from floodings in the mine in the valley of the Sacramento. No difficulty has been hitherto felt in this mine, although shafts have been sunk to a depth, in one instance, of 93 feet. It is of importance to remark that the ore from the deepest shaft yet sunk is richer than that near the surface; and that in addition to the distinct veins, the gold is variably diffused throughout the whole mass of the quartz rock.

Documents, signed by parties of the highest respectability in California, have been produced to the directors, and attest the rich character of this mine. The largest lumps of gold hitherto found in California have been taken from this mine (some of which may, by permission, be seen at the offices of the Company, and one of which was the extraordinary specimen exhibited at the Crystal Palace), and the quality of the gold assayed by the Government Assayer, sent down to San Francisco, by the hands of Major Austill, a box containing 103 lbs. of gold ore, the produce of which was 35 lbs. of pure gold, which the value was \$1825 15 cents, or £1840. The advices from San Francisco, published in the Times of the 17th June, 1851, confirm this statement.

But there is evidence of even a judicial character of the productiveness of the mine. In July, 1851, a trial took place in one of the Courts of California, the verdict in which fully established the fact, an account of the produce of the mine up to that period having been taken under the direction of the Court.

All the locations belonging to the Company are freehold, and no royalty has ever been demanded on the produce.

The title of the company has been recognised by the Government of the State of California; and in an action which was brought against some intruders on the property, the possession of the Company was confirmed, and a writ of restitution issued against the trespassers.

By the latest advices from the mine, there were 70 men at work there, and the supply of ore on the surface was of great size, and increasing. For the purpose of working up this ore, the necessary machinery will be immediately dispatched. Extracts are subjoined from some of the several documents in the possession of the company on the subject of the mine, and the acknowledged position and respectability of the gentlemen who are now in England, and represent the American Proprietors.

Copy of letter from Edward C. Marshall, Esq., Representative in Congress of the Southern Division of the State of California, in which this mine is situated, to the Hon. D. W. Murphy:—

Washington, D.C., Jan. 1, 1851.  
DEAR SIR,—In compliance with your request, as one of the members of the Carsons Creek Consolidated Mining Company in California, I take pleasure in being enabled to state, from having resided within six or eight miles of your mine, and after its discovery having been present there and witnessed your operations, that I regard it, taking in connection its position, its conveniences for being worked with either steam or water-power, together with the richness of its ore, as being unsurpassed by any discovery which has been made in California, or perhaps in any other country. I have seen taken from this mine ore in masses of 1 lb. to more than 100 lbs., containing from 20 to 80 per cent. of gold, at a depth not exceeding 50 feet below the surface. Its elevation is from 2000 to 3000 feet above, and within one mile of the Stanislaus River, which stream affords a constant supply of water-power in any quantity which could be required for mining operations; the country around and adjacent is also sufficiently timbered to admit of the application of steam-power, if desirable. I may further state that the distance from this mine, which is situated on Carsons Creek, in Calaveras County, California, is not exceeding 55 miles from the city of Stockton, on the San Joaquin River, at all times navigable for ships and steam-boats, and the road from thence to this mine is such as to admit of conveyance by stages or waggons, which are now used for this purpose the entire distance.

I am, Sir, &c.,  
EDWARD C. MARSHALL.

Letter from the Hon. John J. McRae, Senator in Congress from the State of Mississippi, to the Hon. R. J. Walker, introducing "his friend, the Honourable D. W. Murphy, son of the late Governor of Alabama, and for several years a Member of Congress from that State," to Mr. Walker's distinguished consideration.

Extract of a letter from E. C. Marshall, Esq., to Thomas Crittenden, Esq., of Liverpool.  
Mr. Murphy goes to Europe on some business relating to the mine in California, of which he is lucky enough to be part owner. It is the richest in that country, and, I have no doubt, in the world.

Copy of letter of the Hon. Wm. M. Gwin, Senator in Congress from California, to the Hon. Daniel Webster, Secretary of State, introducing the Hon. Duncan W. Murphy, for the purpose of obtaining credentials.  
Washington City, January 3, 1852.  
Sir,—I beg leave to introduce to you the Hon. Duncan W. Murphy, a Member of the Legislature of the State of California, who will hand you this note. Mr. Murphy will visit Europe in a few days for the purpose of getting machinery to work the rich vein of quartz rock on Carsons Creek, of which he is part owner. I have visited this vein, and believe it to be the richest in the world, and with proper machinery, the amount of gold that could be taken from it annually would be incredible to those who have not visited it, and become familiar with the richness of the gold-bearing quartz of California.

Mr. Murphy may wish, while in Europe, to make some negotiations connected

with his quartz mine; and I ask the favour of you to recommend him favourably to our Minister at London as a gentleman of honour and integrity, which I know him to be. By so doing, you will confer a favour upon a highly-valued citizen of my State, and greatly oblige  
Your Friend and obedient Servant,  
WILLIAM M. GWIN.

Extract from a report by the Hon. R. J. Walker, late Secretary of the Treasury of the United States, upon this mine, dated Brighton, January 26, 1852, to Messrs. William Hance, President, and the Hon. D. W. Murphy, Director, of the Carsons Creek Consolidated Mining Company of California:—

Your title depends—1. Upon your prior discovery of the mine.—2. Your uninterrupted possession of the same for several years past, and at this period.—3. Your continued working of the mine, together with the improvements made upon the adjacent lots necessary for buildings, &c.—4. Your regular survey of the same, together with the filing thereof, and of your claim in the proper offices in the State of California.

I believe, Gentlemen, that your title will be fully maintained, for the following reasons:—

1. Because I understand it to be in conformity with the usage in similar cases in the State of California, and so recognised in that State.
2. Because your title has already been recognised and maintained by the Courts of California, by a judicial decision now in the possession of Mr. Murphy.
3. Because it is the established policy of the Government to maintain and respect such bona fide possession, accompanied by valuable improvements.
4. This has been specially the case in regard to the gold mines of California. Congress have ever since their discovery, more than three years ago, encouraged the working of the mines by occupants, and exhibited no disposition to interfere with such possessions.

The policy of all the States of the Union is to augment the mining of gold in California. This precious metal is thus carried throughout all the avenues of trade and industry of the whole country, increasing its commerce, enlarging its revenue, stimulating its labour, and tending in every way to augment the prosperity of the country. I believe it then to be the settled policy of the Union to permit things to remain as they are at present in California, without the exaction of any charge for mining, and thus to encourage the working of these mines, and thus increase the gold circulation, as much more beneficial to the country than any attempt by expensive agencies to exact any royalty from the mines. If, however, any royalty should be exacted, it would, I am sure, be very small, and such as would make no material difference to the miners.

For all these reasons, I am clearly of opinion that your title and possession will be maintained undisturbed, so long as you and your successors, or assigns, continue to work the mines.

You request my opinion also as to the value of this mine. I have never been in the state of California, and cannot, therefore, speak like yourself from personal observation. I have, however, formed a very decided opinion as to the value of this mine, and am willing to express it, together with the grounds on which it is formed. I do, then, believe, that this is by far the richest gold mine in the world, for the following reasons:—

1. Mr. Hance is the discoverer of the mine; he is personally well acquainted with it; he has made a written statement in regard to it, and I fully believe in the entire truth of that statement.
2. I saw at New York a variety of specimens taken by Mr. Hance from the mine; I saw the assay of them at our Mint, and at our Branch Mint; as also the assay of other specimens made by Mr. Eberts, of the City of New York, all indicating the same wonderful richness of this ore. Mr. Eberts, who is a practical man, and whose opinion is entitled to great weight, expressed to me the conviction that the ore of this mine was by far the richest ever yet discovered. The great lump of upwards of 50 lbs., now in London, speaks for itself, and requires no comment. Nor is the lump, so far as I have been able to ascertain, anything very peculiar or extraordinary, when compared with the general character of the quartz rock of this mine.

I repeat, then, the conviction of my judgment, that this mine is by far the richest gold mine ever yet discovered.

(Signed) ROBERT J. WALKER.

CERTIFICATE.—This is to certify that we have smelted and analysed two pieces of gold quartz rock, delivered to us by Mr. William Hance, as the produce of a gold mine possessed by him, called the Carsons Creek Mine, in California, and which produced the following results:—Weight of rock, 7 lbs. 4 ozs. 10 dwts., which produced in gold, 5 lbs. 9 ozs. 7 dwts. 12 grs., and contained 17 dwts. of fine silver. The gold was 224 carats, being 1 above the standard.—JOHNSON AND MATTHEY, Assayers, 79, Hatton Garden.

Applications for shares, in the subjoined form, may be made to the brokers, to the solicitors of the Company, or to the secretary, at the Company's offices.

### FORM OF APPLICATION FOR SHARES.

To the Directors of the Carsons Creek Consolidated Mining Company.

GENTLEMEN,—I hereby apply for shares of £1 each in the above Company, upon the terms of the prospectus, and agree to accept the same, or such lesser number as may be allotted to me, and to pay the amount thereof as and when required. Dated this day of February, 1852.

Name .....  
Address .....  
Occupation .....  
References and address .....  
London, Feb. 1852.

**IRON VIADUCTS.**—At the Institution of Civil Engineers, on Tuesday, the discussion was renewed on Mr. Jee's paper "On the Cast-Iron Viaduct erected at Manchester, forming part of the Joint Station of the London and North-Western and Manchester, Sheffield, and Lincolnshire Railways." Mr. Hawkshaw described a nearly similar structure which had been erected at Salford in 1842, forming a junction between the Liverpool and Manchester, the Manchester and Leeds, and Manchester and Bolton Railways. In this structure the columns were placed in pairs, and instead of planking between the transverse girders, flat brick arches, set in cement, were introduced. Some interesting experiments on the strength of the girders were given, and the ingenious steelyard lever testing-machine was described. The question then turned upon the peculiar form of the wrought-iron girder bridge over Store-street, and on the manner in which the experiments had been made for ascertaining its strength. From minute calculations which were given, it appeared that this bridge was, foot for foot, as strong and stiff as wrought-iron cellular tubular girders of the ordinary form; and though, in this instance, the size of the cylindrical top, which was required to be large enough to admit a man for painting the inside, and for necessary repairs, might seem disproportionate to the depth of the girder, yet this would not be the case if the span and depth of the girder was increased, as the cylindrical top might still remain of the same size. By some speakers, however, it was contended that, in applying wrought-iron to girders of comparatively small span, there really was no necessity, nor was it advisable, either as regarded strength or convenience, to adopt the cellular form, but that the girder should be of the ordinary simple double T section, with the bottom flange and the middle web of wrought-iron, and the upper flange either of wrought or of cast-iron—the latter being the best suited for resisting the compressive strain to which that part of a girder was subjected; and it was thought that both of these forms would be a more economical application of material for girders of limited extent than cellular tops. A modification of these different plans was described to consist in a kind of flattened triangular top, of which the base was uppermost, and the plates were thickest, representing the upper flange of the ordinary girder, the two sides being merely thin plates, to prevent the edges of the upper flange from buckling under the compressive strains. Doubts were also raised as to whether painting was the best mode of protecting wrought-iron from oxidation; and it was suggested as an improvement that the iron should, in the first instance, be thoroughly cleaned, and plunged at a low heat in common oil, and then dried. An alloy of cast-iron, containing a small portion of tin, was also said to prevent effectually the injurious effects of oxidation. The method of combining wrought with cast-iron, by Stirling's process, was also described, and the great tenacity and strength of the metal was fully admitted.

**TRANSNANT LEAD MINING COMPANY.**—A general meeting of adventurers in this mine was held on Monday evening, at Gregory's Hotel, Cheapside.—Stephen Broad, Esq., in the chair. A report was read by Mr. W. Gregory, stating that the company was formed to work a set, comprising a run of half a mile on the course of five large lodes in the Transnant estate in Brecknockshire, recently held by the late Abergevin Mining Company, which had expended between 8000l. and 9000l. on shaft, machinery, &c. The shaft is sunk to 80 fms., and adjoins the lodes of the Nant-y-Mwyn Mine, whose return averages 150 tons of lead per month, and run through the whole of this company's property; the royalty was to be 1-10th and 1-12th. The cost was estimated at 3000l., in 17 shares, on the Cost-book Principle. A specimen of the ore at 80 fathoms was produced, and estimated to yield 70 per cent. Mr. A. Dean's report estimated the produce to be 12l. per ton; which, deducting 7l. for all costs, would leave 5l. for the shareholders. The rules of the company were read and passed, Captain Couch appointed the resident agent, a committee of management nominated, and Mr. Gregory chosen secretary; when, after some routine business, and subscriptions for shares, the meeting adjourned for two months.

**HOLLOWAY'S OINTMENT AND PILLS A CERTAIN CURE FOR BAD BREASTS.**—Extract of a letter from Mr. F. Turner, grocer, of Penarth, dated December 13, 1851:—"To Professor Holloway.—Sir: It is with pleasure that I acquaint you of the wonderful cure effected by the use of your invaluable ointment and pills. My wife suffered for more than six months from a dreadfully sore breast, and my medical attendant found impossible to heal. She then tried your medicines, which, in little more than a month, effected a perfect and radical cure, to the astonishment of the many persons who saw in what an awfully bad state it had been."—Sold by all druggists, and at Prof. Holloway's establishment, 241, Strand, London.

## COPIAPO MINING COMPANY.

The half-yearly meeting of shareholders was held at the offices of the company, New Broad-street, yesterday.

CHARLES HEATON ELLIS, Esq., in the chair.

After the usual preliminaries, the following report was read:—

The directors have to state that circumstances have arisen during the past six months beyond the control of the management, which have caused the operations at the mines to be attended with less success than could be contemplated at the last half yearly meeting of shareholders. In the month of July an epidemic prevailed at Copiapo, and the adjacent mineral districts, so severe, that out of 310 miners, so more than 20 were in a fit state of health to follow their occupations, and a great many of the natives died. By the more recent advices, the directors have been apprised of the progress of the revolution in Chili; and the injury thereby inflicted upon all commercial pursuits has been felt to some extent by this company, which will be evident from the fact, that a great many of the natives refused to work; and it had been found necessary to employ several of the English miners to guard the mines by night, to prevent plunder and the probable destruction of property. The shareholders will thus see the temporary hindrances that have occurred; and it now remains for the directors to report upon the past half-year's operations, as well as the future prospects of the mines.

In the six months ending October last, the produce has been 227 tons of copper ore—being 150 tons less than in the same period preceding. The falling off has been:—At Checo, 69 tons; San Pedro, 29; La Compania, 30; La Reina, 11; San Augustin, 11—150 tons. The produce from Checo during the last four months being only 43 tons of ore, and from San Pedro only 10 tons, Capt. Waters had determined to remove nearly all the labourers to La Compania and La Reina Mines, in the Tres Puntas districts, where the prospects of the new and numerous veins are reported to be brighter every fathom they are developed in depth.

The only workings now being carried on at Checo are a cross-cut north in the 40 fm. level, and the end driving east at the Victoria shaft. By the last advices, a discovery had just been made in the 20 fm. level east, where a lode had been cut of rich ore, 12 ft. wide, from which 8 tons had been already taken out; and, being in virgin ground, the agent writes—"I see no reason why we may not find a good mine here, and of its becoming as productive as formerly." The directors hope the next advices will give a confirmation of this cheering news. At Flamenco, the prospect of the San Augustin Mine appears highly favourable, as will be seen by the following extract from Capt. Waters's letter of 9th of October last:—

"FLAMENCO MINES.—I am highly pleased with the reports from these mines. The improvement in the 12 fm. level, at San Augustin, is very important. The class of ore and the quality is now of a superior character. The winze sinking below this level is also good. I have now the greatest hopes of these mines giving largely; and, if so, the facilities for carrying the ore are so great that the returns would be immediate."

The directors expect, before the next meeting, that the further development of these mines in depth will lead to increased returns; but should they be disappointed, the miners will find employment in the Tres Puntas district, where Capt. Waters states there are an immense number of copper lodes; and good ore can be broken from them at once.

**SILVER MINE.**—The directors expected to have heard of a further division of ore, and of a remittance by the last mail; but, owing to the disturbances, some delay has arisen. The prospects of the several mines are good, more especially at the Al Fin Hallada, where, in the neighbouring mine, about 5 fms. distant from the boundary of our set, they have a very rich lode, 2 ft. wide. A cross-cut is being made to this lode, and its intersection is looked forward to with a considerable degree of interest.

Since the last meeting, the following remittance has been received in bar, silver, and gold—viz.: 29th August, lbs. 307 g 7 bar silver, realising, nett, 832l. 1s. 2d.; one ingot of gold, lbs. 3 g 6 16, 142l. 8s. 1d.; making together, 974l. 9s. 3d. The directors have every reason to expect increased remittances in the present year.

The Cuba sailed from Copiapo on the 23d Sept., with a cargo, consisting of 468 tons of copper ore; 35 tons of silver lumps; and 103 tons of silver ore. Since which the directors have advice of the charter of the *Calderon* to load a cargo of about 450 tons, and she has probably sailed by this time. This vessel has been engaged at Valparaiso at the low rate of 37 per ton. The copper market is very firm at the last advance; and the ore by these vessels will realise a better price than has been obtained for some time past.

The directors are glad to be able to announce to the shareholders that the railroad from the City of Copiapo to the Port of Caldera, a distance of about 50 miles, will be completed in the course of this month, and will afford great facility to this company for shipping their stock of ore from Checo and San Pedro; and should the former mine again resume its usual productiveness considerable advantage will be derived from this means of transit. With respect to the estates, Capt. Waters, in his last letter, November 26, reports that on his return from the hacienda he found everything in great order; the wheat crop would be in a state to commence cutting in 10 or 12 days more, and the best he had yet seen; the barley crop was also good, and in a very forward state, so far advanced as not to require any more watering, and there was a good supply of that important element for irrigating the pasture lands, which the manager expects will give a good summer pasturage, and leave an abundance of hay for the winter months, this, under the circumstances of the revolution, is of the greatest moment.

From the favourable tenor of the mining reports received from Capt. Nancarrow during the past six months, the shareholders may fairly expect greater returns from the mines hereafter; and the directors are less reluctant to express disappointment at the diminished produce of late, as it is evident the circumstances referred to at the commencement of this report, must have acted prejudicially to the regular workings of the mines. The directors hope that at the annual meeting they may be able to report that the insurance is at an end, and to submit a satisfactory account to the shareholders of the state and prospects of the company.

Thanks were given to the chairman and directors for the able management of the affairs of the company, when the meeting separated.

**ROCKY BAR MINING COMPANY.**—This company has been organised in the United States, for the purpose of auriferous quartz mining in California, and possesses two claims in that State, said to be most valuable—one at Rocky Bar, on the middle fork of the American river, and the other at Massachusetts Hill, Grass Valley, Nevada County. The prospectus, which has been issued on the resolution having been formed to establish an agency in London, enters fully into a description of the general squatter's law, and the tenure of claims to mineral lands in California. These appear to be perfectly secure, and when once obtained, under the regulations of the United States laws, parties work on them without fear of molestation. The society was first formed by 40 persons, as a labour association, to excavate a raceway and erect a dam, to divert the water of the river from its original channel, for the purpose of collecting gold from its bed, when in three weeks 107 lbs. were obtained. They subsequently enlarged their claims, and admitted 120 more shareholders, making 160 in all; and having discovered that they were in possession of rich quartz veins, directors were appointed, a code of regulations adopted, and an office taken in New York for conducting the financial business and the transfer of shares. A few large shareholders having decided on disposing of 1000 shares in the London market, Mr. G. E. Seymour, 38, Throgmorton-street, is now prepared to transfer such to purchasers. The capital consists of \$1,000,000, in 10,000 shares of \$100 each, and the minimum price for the 1000 shares is 25s. each. The machinery already erected on the claims consists of nine stamps' heads of 600 lbs. each, and an improved large Chilian mill, a 60-horse power steam-engine, with smiths' shop, dwelling houses, coal and wood houses, with a railway from the veins to the mills, and a supply of 200 wheelbarrows. The claim at the Rocky Bar consists of a frontage of 1600 feet along the river, extending to the top of a mountain 11,000 ft. high, and that at Massachusetts Hill of 80 claims, 30 by 40 ft. each, and 30 of 100 square ft. each. One piece of the quartz sent to London, stated to be an average specimen, was assayed by Messrs. Johnson & Son, of Gresham-street West, and produced at the rate of 992 Troy ounces to the ton.

Accounts from the Australian gold mines have been received from Sydney to the 11th November, being a month later than the last dates. They confirm all the anticipations thus far entertained of a permanent and increasing yield. At Bathurst, and on the Turon River, operations were being steadily carried forward, and new deposits were found with sufficient frequency to show that the ultimate results are likely to be precisely similar to what has been realised in California. The fresh spots chiefly mentioned are at Braidwood and Lake Bathurst, about 150 miles south of Sydney, and consequently in a direction different to the discoveries hitherto, which have been to the north-west. Including the amount shipped in the present vessel (30,000l.) the total export from Sydney had already reached 340,000l. This was during a period of five months, and as it was estimated also that at least 100,000l. was still in the hands of miners, it would appear that the total production has been at the rate of upwards of 1,000,000l. per annum. Some considerable quantities of the gold from the Port Phillip mines had found their way to Sydney, and had been really bought on account of their great purity: 1000 ozs., purchased by one party at 3l. 4s. 6d. per oz., were found 74 per cent. better than standard. The dates from Melbourne, by their arrival, are to the 6th November. The general rush from Melbourne and Geelong to the mines at Ballarat appears to have resulted in disappointment, but there was subsequently a re-action in their favour. The Lieutenant-Governor, during his visit to Ballarat, had proposed to the miners that they should withdraw for two months, their claims being meanwhile guarded, in order that the crops of the colony should not be destroyed. "This (it is said) was warmly responded to by a very large majority, so that our harvest may now be considered safe." It remained to be seen, however, whether the resolution would be meted by the miners, and it was likely to be effected by some great discoveries since made at a place called Mount Alexander, which was alleged to eclipse Ballarat, and where it was said one man had obtained 11 lbs. of gold in 48 hours. The *Phanix*, by which the advices have been brought, arrived at Plymouth on the 3d instant, thus making the unprecedentedly short passage of 53 days. Part of her cargo consists of 74 packages of gold dust, weighing 22,949 ozs., valued at 81,000l.

Our later Californian accounts mention that new developments of rich leads of quartz are being made every day in Nevada county. The extensive operations in working quartz now in progress are comparatively small, as contrasted with the immense masses that are opened and proved, and it further appears that the quartz leads, upon which expensive machinery has been erected, and which are generally paying so well, are not, on an average, better than those as yet unworked. A local journal has entered into a calculation to show that quartz paying not more than 1 cent per lb., with adequate machinery, will produce a clear profit per day of \$1000. The general average value of the quartz now being worked in this district is 3 cents per lb., and millions on millions of tons of quartz that will pay at this rate are stated to be now lying discovered, yet unworked, capital only being needed to turn this huge gold-field to a most profitable result.

A deputation from the directors of the Australian Gold Mining Company, consisting of Messrs. F. W. Flower, John Lambert, and William Walker, and Mr. J. T. Wright, secretary, had an interview with Earl Grey, on Wednesday, at the Colonial Office.



## MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

**NORTH TRELAUNY.**—A deputation of gentlemen connected with this important mine is now in the county, and have called in the opinion of nearly all the mining captains of the district—some of whom are the most practical men in the whole county of Cornwall, accustomed from childhood to mining works, and whose present position places them beyond the slightest suspicion. They all agree in declaring it to be one of the finest discoveries made in the county, and are unanimous in opinion that an abundance of lead ore will be met with within, at the outside, 20 fms. under the adit. It has, therefore, been determined to continue the existing works with all vigour, and to erect a water-wheel forthwith. The opinion of Mr. C. S. Richardson, of London, and others not so closely identified with the county, had been previously obtained; and the present inspection fully substantiates all they asserted. Amongst those who have gratuitously inspected the sett was Capt. John Floyd, of Stoke Climsland, than whom, it is well known, there is not a more experienced or practical miner in the whole of the Duchy, and who has made more valuable mineral discoveries than almost any person connected with mining enterprise. He says, under date of the 1st instant—

"In handing you this report, I have to say the long-established opinion of miners and tinners, scientific and practical, is this—the neighbourhood of Linkinhorne, particularly about the vicinity of the granite Caradon hills, abounds in tin, copper, and silver-lead ores—the former to time immemorial; and, at the present day, it being so well known, it is useless to do more than allude thus generally to the fact, that the locality affords more than ordinary inducements to persons inclined to embark property in mining. Under this impression, I send you the report of North Trelawny sett, which I have carefully inspected in presence of Mr. John Gumb, the agent of the mine. The first thing I have to call your attention to is the splendid river of Lyner, which is the south boundary of this valuable sett, travelling about 2½ miles per hour, with sufficient water to develop the mine 150 fms. deep—not only sufficient water for draft engines, but also sufficient for working any kind of machinery that will be wanted—such as stamping and crushing the different ores that will be risen in the said tin, copper, and silver-lead sett. The said stream is at least worth 3000l. per annum to the proprietors, because the stream will wholly supersede the necessity of steam-power, which is such an expensive item in mining operations. Secondly, I have to inform you there are two east and west copper lodes running through the length of the sett—one underlying north and the other south, and will form a junction in about 50 fathoms deep. The size of these copper lodes is from 3½ to 4 ft. wide, and underlying about 2 ft. in 6 ft. composed of brown gossan, quartz, prun, flookan, and muddle—two very hopeful copper lodes for making thousands of tons of copper; neither do I hesitate in saying it will be the case. Thirdly, my attention was called to a most splendid silver-lead lode—all of 15 ft. wide. Such a splendid silver-lead lode I never before saw; and I have been a miner 42 years, and have worked on tin, copper, and lead ore in all its branches. This large silver-lead lode is underlying 1 ft. 5 in. in 6 ft., with the footwall very smooth and well-defined. The hanging wall is not smooth, but rough; and none the worse for being so, for reasons I can prove in my mining operations. This large lead lode is composed of light brown gossan, quartz, flookan, and spots of silver-lead ore. From this kindly appearance, I have no doubt on my mind (neither do I hesitate to say) that, at 20 fms. deep, abundance of ore will be met with and drawn to surface."

**PENCRAG LEAD MINE** is situated near Llanwrthol, Carnarvonshire; and has up to this time sold about 200 tons of lead ore by private contract. Captain Abanlon Francis has recently inspected it with some other mine agents—all of whom report favourably. The sett extends over 174 acres, through which seven lodes are represented to pass. The lease is unexpired for 18 years, at 1-10th royalty. The transport of ore from the mine to Holywell is 9s. per ton. The lode is yielding some good ore, and is parallel with the vein at Coed Mawr Pool, about three-quarters of a mile north.

**TREMAR COPPER MINE** (St. Cleer).—On Monday a splendid 40-in. steam-engine, manufactured by Messrs. Thomas and Co., of Charlestown, from drawings by Mr. West, C.E., was set to work on this highly promising concern, and went off in style, amidst the hearty plaudits of numerous spectators. A large party of shareholders, with agents of several of the mines in the neighbourhood, and gentlemen from Liskeard, adjourned to the Sun Inn, Crownst, where a substantial repast, served up in Mr. and Mrs. George's usual liberal and creditable style, was done ample justice to, under the able presidency of Peter Clymo, jun., Esq. The entertainment passed off with much conviviality, every one present appearing highly delighted with the proceedings of the day. In the course of the evening several "practicals" expressed their full concurrence in the opinion of the respected manager (Captain Rule), that Tremar would eventually prove worthy of her vicinity to the Caradons, and if the operations were continued in the same spirited manner as hitherto, dividends would speedily be the result. It is highly creditable to the management, that amidst their own festivity the working miners, and other workmen, were not forgotten—an abundance of good beef, and other *ceteras*, being liberally supplied.

**WHEAL INDUSTRY TIN MINE.**—We are glad to hear that a good bunch of tin has been cut in the adit level, computed to be worth 25l. per fathom. All the practical men who have inspected this mine concur in opinion that this is a wonderful discovery.

**DEVON AND CORNWALL MINERS' GOLD COMPANY, AUSTRALIA.**—We understand the share list of this company closes on Monday; and by an advertisement in our columns it would appear the allotment of shares will be made forthwith. Among the numerous projects which have been fostered by the astounding reports from the gold region of Australia, this company appears from the extraordinary number of applicants for its shares, to stand exceedingly well in public estimation; and, so far as our capacity will enable us to judge, we think its supporters are discriminating very wisely, inasmuch as the elements of the company are *bona fide*. There are three things more especially in its favour, to which we must briefly draw the attention of our readers. First, a grant of 800 acres of freehold land, most eligibly situated, and bounded on two sides by the celebrated Crookwell stream, has been purchased and obtained on reasonable terms; secondly, the company is promoted by persons practically acquainted with mining and machinery in all its features and requirements; and, lastly, the entire superintendence of the experiment is to be entrusted to Mr. G. Gard, of the Devon Great Consolidated Mines (the fame of which is patent to all the world, and a reference to our share list will fully bear testimony); not that we mean to infer that Mr. Gard's connection with so great an undertaking can possibly have enhanced the value of that mine itself, but we do assume very confidently that the fact of that gentleman having been a responsible *employé* in such an undertaking for several years, coupled with his previous residence in Australia, is, of itself, a sound reason of security as to his integrity of purpose; and the shareholders of the Devon and Cornwall Miners' Gold Company cannot fail to appreciate the advantage of Mr. Gard's practical knowledge in the adaptation of every requirement in furtherance of the undertaking. We understand Mr. Gard's appointment was backed by the most flattering testimonials, and we sincerely congratulate the company and himself on that appointment.

**THE AUSTRALIAN FREEHOLD AND LAKE BATHURST GOLD MINES.**—These two mines, adjoining Lake Bathurst, in the county of Argyle, Australia, are most valuable properties, as appears from the intelligence brought over by the ship *Phœnician*, on Thursday last. The former of these mines has obtained the whole of its capital, and arrangements are being made to send out machinery, engineers, and workmen, forthwith. We think that, inasmuch as these two properties adjoin each other, and the course of the veins runs through the centre of both, it would be desirable, as soon as the Lake Bathurst Company has obtained its capital, to effect an amalgamation between the two companies. The *Times* of yesterday, in speaking of the new deposits found in Australia, states that the fresh spots chiefly mentioned in the accounts brought over are "at Braidwood and Lake Bathurst." From private letters, there also appears to be another place, called Broun, lying about half way between Braidwood and Lake Bathurst, in which very large deposits have been found. A large party went from Sydney by the *Shamrock* steamer, to prosecute gold digging at these localities, and by the last accounts their operations had been attended with great success. The Rev. Mr. Clarke (who disputes the first discovery of gold with Hargreaves) had been occupied in a geological survey of the Shoal Haven district, and from Marulan to Maneroo, including the Badawan and the country about the Araluen, and the ranges about Lake George, in many parts of which he had discovered gold. The property of the Freehold and Lake Bathurst Mines are in these ranges, and private letters give an account of successful diggings in their immediate neighbourhood.

## ACCIDENTS.

**Ringley, near Manchester.**—At the inquest on the bodies killed at Messrs. Knowles' and Stott's colliery, noticed in last week's Journal, the following verdict was recorded:—"We strongly urge upon Messrs. Knowles and Stott the immediate necessity of adopting the improvements suggested by the Government Inspector, as we consider that proper management has not been observed in the conduct of the works of the mine. We are also of opinion that the workmen themselves are not free from blame in going into the pit with naked candles, without having first ascertained that the pit was in a proper state to allow of such a proceeding. We also think that the engineer engaged to keep the water sufficiently low to allow of a free current of air was guilty of carelessness in the exercise of his duty." It was stated that the recommendations of the inspector had been already carried out as far as possible, and they would be completed without delay.

**Sunderland.**—P. Bargain, aged 11, fell out of the ship at Coxhoe Old Pit, and was killed.

**Holywell.**—The names of the men who were killed at the Holywell Lead Mine, as stated last week, are John Davies and Thomas James. H. Stoddart was so cut about the head that he is not expected to survive, and several others are much injured.

**Pemberton.**—J. Sharples was killed at the Winstanley Colliery by a fall of roof.

**Rosely Regis.**—Anthony Harrison was crushed to death by from 50 to 60 tons of coal suddenly falling, without the slightest warning, at the Black Wagon Pit, the property of the British Iron Company. Another man is cut and bruised, but he is not expected to survive, and a horse was also crushed to death.

**Holbeck.**—J. Binnerley was killed by a piece of coal falling from a loaded skip down the shaft belonging to the Arley Company, 157 yds., and striking him on the head.

**Dudley.**—W. Davies was killed by a fall of coal at Tivdale Colliery.

**West Bromwich.**—W. Harris was killed at the Lodge Colliery by a fall of roof.

## Mining Correspondence.

## BRITISH MINES.

**ALFRED CONSOLS.**—The lode in Field's engine-shaft, sinking under the 90 fm. level, is much as reported last. The lode in the 90 east is 6 ft. wide, worth for copper ore 90l. per fm. The lode in No. 3 winze, sinking under the 80 east, is worth for copper ore 70l. per fm. The lode in the 90 west of Wyld's shaft, is 3 ft. wide, worth for copper ore 40l. per fm., with the appearance of still improving. No change to notice in the cross-cut south of this shaft, in the 80, since the last report; neither in the 60, west of the engine-shaft. Our tribute department looks well.

**BAT HOLES.**—The lode in the 60 fm. level, driving south, is 4 feet wide, yielding work of a coarse quality; in the same level driving north, the lode is still small and unproductive; but, judging from the bottom of the level above, we expect a change for the better to take place shortly. In the 48 fm. level, driving north, the lode is 4 ft. wide, yielding about 15 cwt. of lead ore per fathom—a promising end. The lode in the winze sinking below the 40 fm. level north is 4 feet wide, spotted with lead ore—saving work. We have about 5 fathoms to sink at this point, when a communication will take place between the 48 and 40 fm. level north, whereby it will lay open a piece of ground in the back of the 48 fm. level (north of our present workings), about 20 fms. in length, that will set at a moderate tribute. Our sampling for January will be somewhere about 50 tons, unless the severity of the weather prevents our washing in time for the cost-sheets; and according to the number of tributaries who took here on Saturday last (it being our setting day), we look forward to an increase for February.

**BODMIN WHEAL MARY CONSOLS.**—The sinking in the shaft is progressing favourably. Should it be the intention of the company to drive the 60 fathom level west, under the old workings, it would be advisable to drive a 40 fm. level in that direction at least, as far as the new shaft—and ventilate it to 50 ft. by a winze from the 40. Should this be decided upon, the sooner we drive north the better. There has been no lode taken down in the 40 since last report. The lode is not yet cut in the 30 south; the killas is very good, and the sand very wet. We have two men west on No. 6 in the 30 fm. level; the lode is improved for ore since last report. There is no material alteration in the pitches.

**BOLEWOE.**—The engine-shaft is progressing satisfactorily, lode 2 ft. wide. **BRYN-ARIAN.**—I do not see any particular alteration as yet in the 80 fm. level, although within the last few days we have had more water coming out of the ground than we have seen before since the end commenced driving. The winze sinking under the 20 fathom level is yielding 14 tons of ore per fathom; we have suspended the working of the stop in the back of this level, in consequence of the winze sinking just under; the lode in this level driving west is large, and spotted with lead ore. The Wood lode east of the old workings is small and unproductive. The lode in Hallett's shaft is 5 ft. wide, with some small branches of lead ore. The stop in the back of the 20 fm. level north is yielding 15 cwt. of ore per fm. Joseph's lode in the deep adit level, driving south from the side of the hill is 5 ft. wide, with a strong mixture of ore throughout.

**BUTTERDON.**—The side lift was set to work and the engine driven as fast as possible, delivering 500 gallons per minute; still the water continued to rise—therefore, we have thought it advisable to suspend operations for the present. This is very unfortunate, when only a few days more would have laid open the lode to the 50; still there is no help for it at present.

**CALLINGTON.**—At the south mine, the 125 fm. level is driving south, by six men, on the lode in the 125 and 124 fm. level, and will produce 6 cwt. of lead per fm.; the lode in the north end, in this level, going towards count-house shaft, is driving by six men; the lode in this end is 18 in. wide, saving work. The rise over this end is up 8 fms.; no lode has been taken down in this rise since commenced; we are pushing on this as fast as possible, to hole to the 112, to ventilate the 125 north. The 112 south is driving by four men; no lode taken down for the last 2 fms.; when taken down it was 18 in. wide, saving work. We have also set the 100 south to drive by six men; this is from 20 to 30 fms. behind the 112 fm. level. We have two pitches working in the back of the 112, south of the 100 end, which makes the driving of the 100 and very important for ventilation, as we have such a length of ground south of our present working on the lead lode, and in such a beautiful fine clay-slate stratum, which is congenial for lead. We should recommend the extending of that part of the mine south with all possible speed. At Kelly Bray, in the 70, we have put six men to drive east; the lode is 23 ft. wide, good saving work. The stop in the back of the 70, east of the rise, will produce 2 tons per fm. The lode in the top part of the rise, on to the 60 fm. level, is not taken down as yet; this will serve for the 70 back stop to take away. We have put the shaftmen to rise in the back of the 60 in the main body of the lode, to get in contact with the engine-shaft near to the 50 fm. level. We shall have to make a new engine-shaft very near the 50, in consequence of the mistake in drilling for the old engine-shaft; it is of no use below that level. At the midway level we have four men stopping west of the rise, which will produce 14 ton per fm. At the north mine, in the 20 fm. level, No. 1, we have four men stopping in the back, to prove the lode west of the slide; the lode in this back is 14 ft. wide, composed of muddle, quartz, blende, and stones of copper ore, of good quality. We intend to sample a parcel of copper ore and stones.

**CALSTOCK CONSOLS.**—A large counter lode has been cut in the eastern level, which intersects the main lode at an angle of 45°, underlying north east; a large quantity of water is issuing from it, which contains copper in solution. The size of the lode is not yet ascertained, but we have driven into it 4 ft.

**CARTHEW CONSOLS.**—Up to this date (Jan. 31), I find no alteration has taken place of importance in any part of this mine. The ground in the north end, in the 95 fm. level, still continues hard, and has been set to-day at 6l. per fm.—a price that we have never before given here for such work; the lode produces some good stones of copper. As the south end is now in the one we have been working last, and I would strenuously urge on the committee that there would be a very great probability of obtaining good results by adhering to the proposition therein laid down, especially by driving on the adit level; likewise, in addition to sinking the new shaft, in my opinion, a much greater object would be attained, and at one-half the expense of the present mode of working. The tribute pitches are not showing as well as they have been in times past.

**CEFN CAL SLATE QUARRY.**—We continue on the driving in No. 4, but the late weather has been very unfavourable for our workings. There is no change to notice in the ground at the bargain north of No. 4 workings—the rock is at present turning out good slates.

**CEFN GWYN.**—The plat in the 10 fm. level will be completed by the end of this week. The lode is 9 ft. wide, two of which a good mixture of ore, yielding at present 15 cwt. of ore per fm. We shall have to continue the driving of this level east for 2 or 3 fms. previous to our resuming the sinking of the engine shaft.

**CHARLESTOWN UNITED.**—We have a decided improvement in the lode which we are cross-cutting south of the gossan, west of No. 1 cross cut, and during the week we have been breaking some splendid work from this place. This cross-cut has been driven into the lode about 11 feet, and no appearance yet of the south wall. This lode will be seen by my having let two bargains to drive east and west on the north of gossan, is Buckler's north lode. We have also commenced driving our No. 2 cross-cut to intersect the south lode at this point (which is about 35 fms. east of the place we are now cross-cutting in the lode), which we shall prove shortly. We are still raising excellent work from the backs between No. 1 and No. 2 cross-cuts, on the north lode. The other parts of the mine are much the same as last reported. We did intend going to the smelting-house yesterday (Jan. 30) with tin, but in consequence of the roughness of the weather, and our dressing-floors being so much exposed, it has greatly delayed our progress in dressing. We shall now carry the tin to market on Friday next, which will be about 5 tons.

**COED MAWR POOL (LEAD).**—Since my last report, the No. 3 lode has been intersected by the cross level from the 15 fm. No. 1 shaft. The promising appearance of this lode will be seen by my having let two bargains to drive east and west on this lode at 32l. per fathom, and 20l. per ton on all lead raised. I am daily expecting to intersect No. 2 lode, lying south of No. 3 lode, from the same cross level. On No. 1 lode, 17 yards south of No. 3, is Jones's sink, which will be 15 fms. deep by the end of February. Notwithstanding some interruptions in January, caused by putting down a lift of pumps, about 11 tons of ore were raised; and this month I hope to raise 30 tons from this spot alone. I shall shortly continue the cross level further north to intersect No. 4 and No. 5 lodes. The whole five lodes lie within a width of 47 yards; and when these are in full work, I have the fullest confidence that the monthly output by the No. 1 shaft will be 100 tons. From the No. 2 shaft, which is sunk 15 fms. deep in the western end of the sett, I am driving a level north to intersect No. 1 lode, which at this point runs under the lake. I have 90 yards more to drive, when I shall be under the surface workings, from which so much ore has been raised. On reaching this lode, it is my intention to drive west and also east, to meet the levels on the same lode, now in course of driving west from the No. 1 shaft. I shall also continue our north level so as to intersect with all speed the remaining four lodes. These operations complete, I shall have equal work in all the lodes now in the mine, and my commerce will be working most satisfactorily. I have advice that the last shipment of lead (31 tons 13 cwt.) was sold at Holywell on the 21st January, at 104. 10s. per ton.

**CUBERT SILVER-LEAD.**—The engine-shaft is down 6 fms. 4 ft. 6 in., ground easier for sinking, good looking for lead. In the 35 west we have not yet got into the main part of the lode; it spreads as it goes west, and proves to be a little further south than we anticipated. The 35 east is passing through a good bunch of lead, ground much better for driving; the same level west from this point is yielding some good work for lead. In the 25 west the rise is holed, and the men are clearing their stuff to resume driving the end, where there is a branch of lead. In the winze in the bottom of the 25 east the men are breaking some good work for lead. Henry's shaft, sinking below the 25 is disordered. In the 15 east the other part of the lode is coming in the end, a large promising lode, full of good-looking lead; this end holds forth great promise. The tribute pitches throughout are producing a fair quantity of work for lead. As the weather has been against the dressing, I have given notice to sample 30 tons of lead on Friday next.

**CWMYSTWTH.**—The new discovery of ore continues good; about 5 fms. has been opened upon it, and has produced 15 tons of ore, and it looks well all round. A day level will be commenced, which will give a back of 45 fathoms on this lode. It will have to be driven 50 fms. before reaching the north lode, but will intersect two other lodes in its course. Pengellian lode is looking rather better than it was, there being a little ore in the ends. In other places no alteration. On the 2d instant 50 tons of ore were sampled.

**CYFANNEDD FAWR.**—We are continuing on with the driving in adit, and have come to a change of ground, but have still some 3 or 4 fathoms to drive before reaching the lode.

**DEVON AND COURTENAY.**—Since my last report we have broken some good stones of ore in the 60 end, and the lode is large and well-defined. The 70 and west is looking better—a kindly lode, especially towards the bottom of the end, from which I have this morning broken some good stones of ore. There is a further improvement in the 70 east; the lode will produce 2 tons of copper ore per fathom. There is no change to notice in any other part of the mine.

**DOLFRWYNOG.**—At Williams's, the engine-shaft, the water has much increased since my last; this is partly caused by the late heavy floods, also to our having cut a leader of the lode, bearing towards the great gossan lode, and carrying copper, jack, sulphur, and barites all through. We expect to complete the 15 fms. in the course of this week, when we shall at once put the pump down. In our driving on the Boy lode the ground continues very kind and promising, with copper intermixed all through.

**EAST CROWDALE.**—The 58 fm. level has been through the cross-course into the western leave of the lode; and we are sorry to inform you that the lode on both sides of the cross-course is very poor. The only bunch of ore we have seen on this lode in driving so many fathoms, is but about 2 fms. long, and, by stopping, it does not appear to hold either up or down. Our only chance is to drive west on the south lode, and work on the cross-course, to cut the north lode, which will throw some light on the prospects of the mine, which at present are anything but encouraging. The rise in the back of

the 58, on the north lode, is not yet holed to the 47, consequently we could not set a tribute in the back of this level; but we have set one pitch in the back of the 47 to the men, at 18s. in 17.

**EAST SETON AND WHEAL MAUD.**—The 10 fathom level is extended 53 fathoms east of the engine-shaft, generally through a kindly lode; we have had to ground for the last 12 fms., the last 6 fms. producing 2 tons of good ore per fathom. The present end continues equally good. The 20 fm. level is extended 39 fms. east through bunches of ore; the end has of late been poor, but is now 16 in. wide, with stones of ore, and we expect shortly to meet with the same run of ore as we have in the level above. The 10 and 20 fm. levels have been extended west about 30 fms. each, and have produced ore, but have of late been poor, and are now suspended. The engine-shaft is 29 fms. under the adit; the lode is 2 ft. wide, kindly, with stones of ore—we intend driving east and west in this level. We are also driving the adit north of the western shaft, which is 102 fathoms west of the engine-shaft, to intersect some north lodes. We sold 31 tons of ore on the 1st inst., at 47. 3s. per ton, and expect on the 4th March next to sell 20 tons or upwards of better quality.

**EAST WHEAL GEORGE.**—We have set to-day as follows—a cross-cut to drive south in the 31 fm. level, to intersect the lode, to divide and put in footway in the shaft, and also to send down a 6-inch lift, at 15l. the bargain. I calculate we have 2 fms. to drive to cut the lode. If nothing occurs to prevent the men from working, I expect it will be intersected within three weeks from this time. I have let a pitch in the back of the 12, west of shaft, to two men, at 10s. in 11, and also a pitch to the east of the shaft, to two men, at 10s. in 11, to try to pay all dressing cost. The gudgeon of the hoisting barrel, but little has been done in the bottom of the shaft this week. We sampled on Monday 11 tons 19 cwt.; the next will be more.

**EAST WHEAL REETH.**—The engine-shaft is down 3 fathoms below the 24 fm. level. The lode in the shaft continues its size, and a little more productive of tin, and the ground maintains its favourable character for sinking. I set on Saturday last the sumpmen 7 fms. to sink, at 10l. per fathom. The 24 end north, or north caunter lode, is in the end 18 in. wide, and much improved for tin since my last report—this is the same shoot of tin discovered in the 10 fm. level above. Notwithstanding this improvement at this point, I would recommend suspending the driving here, as the shaft is going down, and a deeper level under this point, will effectually develop its qualities. I have arranged, with the committee's consent, to put this part of men to drive east on the great caunter, discovered in the south cross-cut from the engine, of which I have written you before; we set on Saturday at this point at 6l. per fathom, and I have great hopes of making a discovery here soon. The 24 end, on No. 2 lode, has in it a very promising lode, but not rich yet. The operations altogether on this mine are progressing satisfactorily.

**EAST WHEAL RUSSELL.**—We have sunk Hitchins's shaft, since the 1st Jan., 7 fms. 2 ft.; the lode is just the same as in my last report, altogether splendid. We have driven the cross-cut south in the tunnel level 6 fms. 2 ft. from the north wall; the present end is looking much improved with ore, and plenty of muddle. I am expecting a great change every core the men work. I have had a sample of the stuff assayed from the rise in the tunnel level by Mr. Harvey, of Tavistock; it will not produce more than 10s. per ton. I have stopped the rise until further orders.

**ESGAIR LLEE.**—We have set the 10 fm. level, east of cross cut, on the middle lode, to six men, 8 fms., at 4l. per fathom—drove last month on the cross-cut 7 fms. 3 in.; and east on the lode, 24 cwt. of tin per 100 sacks. The lode in the 10 fm. level, east of cross cut, is 6 in. wide, saving work; the intersecting lode has so much increased the water as to make it necessary at once to sink the shaft 4 or 5 feet for bearers and cisterns, to put down a larger lift, which we have on the mine. The 10 fathom level, east of engine shaft, on south lode, to four men, 6 fms., at 4l. 15s. per fm.; this level is communicated with the winze from the deep adit—the lode standing for 2 fms. behind the end and for 9 feet high in the winze, which we shall begin to take down at once, and some appearance in the winze and level is likely to turn out well. The deep adit, east of Jones's winze, on the caunter lode, was driven last month 2 fms. 8 in. and is disordered by a cross-branch, producing tones of ore, but not sufficient to set a value on; the additional length of ore ground in this level is about 11 fathoms.

**GREAT POLGOOTH.**—The lode in the 96, east of Clarke's, is large, and producing good stuff. The cross-cuts in the 96 and 84 fm. levels north are progressing, and the ground is easier than it has been. The middle lode in the 84, east of Clarke's, is poor; the south lode, driving west in the 84, east of Williams's, is worth about 10 cwt. of tin per 100 sacks. The lode in the rise, to hole from the 96 to the 84, is small, but rich, and worth about 20 cwt. of tin per 100 sacks. The lode in the winze under the 76 was rich until heaved by the elvan course. We are now sinking through the elvan, and expect to meet with the lode again shortly. We have suspended the 66 east to sink a winze to the 76, for the purposes of opening tribute ground and for ventilation. The lode in the winze, east of the 66, east of St. John's, is worth 2 cwt. of tin per 100 sacks. The lode in the 20 fm. level west, at Bardwell's, is worth 2 cwt. of tin per 100 sacks. The five pitches in the 84 fathom level are all producing tin, worth 8 cwt. of tin per 100 sacks, and the pitches generally are looking favourable. Since our last report, we have sold two parcels of tin—in value about 1225l.

**GREAT WHEAL BADERN.**—The 50, east from Buckley's, is unproductive—ground hard for driving. The 40 is improving in size, with spots of lead and muddle. There is a good branch of lead in the 30, east of Burgan's, and a large lode east from Kenworthy's, with a small portion of tin. We have begun to sink a shaft on the hill on the tin lode, where the ground is favourable. The stopes and tribute pitches generally are looking pretty well.

**HENNOCK.**—The engine-shaft is sunk 5 fms. 2 ft. under the 80 fm. level—ground still favourable for sinking; the 30 fm. level north is driven 2 fathoms on the course of the western lode; the lode averages about 5 ft. wide, not producing as much gale as when last reported, but more carbonate of lead, mixed with a beautiful gossan, soft quartz, &c.; altogether the end is showing a first-rate appearance; the 80 fm. level south is driven about 4 fms. from the engine-shaft, the lode producing more lead than I have seen hitherto to the south of the shaft.

**HERODSFOT.**—The stopes in the 127 south are looking well. The piece of ground driven upon close to the end, which I apprised you of our setting the men to take down, is turning out very well, and yielding 15 cwt. of ore per fm. There is no lode taken down in the 82 and south since I saw you; it still presents a favourable appearance, as far as may be judged from the wall, which indicates a hard and strong lode. There is no alteration in any other part of the mine.

**HINGSTON DOWN CONSOLS.**—The lode in the 55 fm. level, east and west of Victor's winze, is improved, being on an average worth 3 tons of ore per fathom; west of Doidge's winze 4 tons per fathom; the lode east of adit winze is more promising, though poor. The lode in the winze sinking below the 45 is large, and ore throughout, but in consequence of increased water is suspended. The new shaft (Morris's) progresses satisfactorily. The rise in the back of the 35, towards the said shaft, progresses satisfactorily. We sampled, on Friday, a parcel of ore, computed 110 tons, of good quality.

**HOLMBUSH.**—The ground in both engine-shafts (Hitchins's and Wall's) is still very favourable. The lode in the diagonal shaft, sinking below the 132 fm. level, is 14 in. wide, producing 3 tons of copper ore per fathom, with favourable ground for sinking. The lode, which is a very important point; the lode in the 132, east of the last-mentioned shaft, is split into three branches, and from each of these branches a cross-cut junction—say, within 2 fms.—when no doubt, from what we have experienced before, a great improvement will be found. At present, these branches will produce 14 ton of ore per fm. The stopes in the bottom of this level will produce 3½ tons of ore per fathom; the lode in the 132, north and south, is 16 ft. wide, composed of quartz, prun, and stones of lead. The flap-lack lode in the 120 fm. level, east of the great cross-course, will produce 4 tons of ore per fm. In the back of the level, but only 2 tons of ore in the bottom; the lode being smaller, which is nothing new, such changes have ever been found in mineral lodes or veins. The lode in the 110 fathom level, east of the cross-course, on the same lode, is 6 ft. wide, producing 5 tons of ore per fathom. The lode in the 100 fathom level east will produce 4 tons of ore per fm.; the lode in the 100 fm. level, west of Wall's shaft, will produce 14 ton of ore per fathom. The tribute pitches in and throughout the mine are much the same as they have been for some time since, producing, on an average, a fair quantity of mineral. We sampled, last Friday, at Calstock Quay, 300 tons of copper ore, by computation.

**KINGSETT AND BEDFORD.**—The ground in our cross-cut is very hard: from 3½ to 3 ft. wide per fm. as much as six men can lay open. I fully calculated on having better ground long before this, but our progress being limited to a few feet per month, accounts for our not getting through it as soon as we had at first anticipated. Price per fm. 18l.

**KIRKCUDBRIGHTSHIRE.**—The 86, west of Stewart's, is a large sparry lode, with spots of ore; the north part of the lode on which we are driving in the 86, east of Gillip's, has spots of ore in the spar. The 74 east has a small branch of ore coming in again. The 74 and 62 east are as last reported. We have shipped off another cargo of lead (45 tons) to the Dee this week.

**LAMHEROE WHEAL MARIA.**—Jessie's shaft is being sunk 11 fathoms 4 ft. below the 14 fm. level, which leaves us 4 fms. 2 ft. more to sink to reach the 30 fm. level under adit; the killas in the shaft is harder, therefore more sparry for sinking; ground sunk last month 2 fms. 2 ft. There is no alteration in the ground in the 60 cross-cut north; we have driven all the ground to reach the champion lode, allowing it to underlay 3 ft. in a fathom, and if it underlays 3 ft. 6 in. in a fathom, we have 5 fathoms further to drive to cut it, but we shall be expecting to bring it to view every day. Our dresser did not make so much tin marketable as he anticipated, but it must be attributed to the flux being so full of arsenic; he could not make that progress in burning the tin which he would had the flux been cleared out. However, Mr. Jennings's agent has made arrangement with me to take it out; we had packed 50 sacks last Saturday, the remainder he has ordered to be put into a house until he removes it, which we shall do next Saturday, the 7th inst. Doubtless our purser has sent you the particulars of the tin sold last week.

**LYDFORD CONSOLS.**—We have forked the water and cleared the rubbish 8½ fms. below the 80 fm. level, and hope by this day week to reach the 60 fathom level, where we expect to meet with some good ore ground. We continue to save some good work from the rubbish in clearing the shaft. We have completed the balance bob and attached the wheel, which answers well all the purposes for which it was intended. At Wheal Mary, in shodding we have met with a lode 1 ft. wide, of a kindly nature, being composed of gossan, flookan, &c., exactly similar to the western lode at Wheal Adventure, a continuation of which we suppose it to be. We shall now extend the lode further east, for intersection of the eastern Wheal Adventure lode, as also the Wheal Mary north and south lode.

**MERLLYN.**—At the engine-shaft the plunger-lift has been fixed, and we are now making preparations for sinking. The 35 fm. level is looking more promising and producing a small quantity of lead. The lode in the 16 fm. level is 3 ft. wide, and has now a leader of lead, worth 6l. per fm., and has the appearance of the top of a bunch of lead; the stopes in the back of the 16 fm. level are worth 25l. per fm. The back of the 26 fm. level, east of winze-shaft, is worth 35l. per fathom; the back of the same level, east of engine shaft, is worth 60l. per fm. By stopping the engine to change the pit-work the water has got into the shaft on the old lode, consequently nothing has been done there this past week; we are now clearing the 30 west on the old lode.

**MOLLAND.**—The lode in the 42, east of shaft, is about 2½ feet wide, with stones of ore, and ground improved for driving; the lode in the 42 west is about 2 feet wide, with spots of ore. The lode in the back of the 30, east of shaft, has a good stone of ore, but not so much as last reported; the winze sinking under this lode is much improved; the lode is from 2 to 3 ft. wide, with good spots of ore; the lode in the 20 end, in the same level, is rather disordered by a cross branch, and the ground improved for driving.







## PATENT LAW REFORM—PUBLIC MEETINGS.

On Monday last, a public meeting of the National Patent Law Amendment Association was held at the Belle Sauvage Hotel, Ludgate-hill, for the purpose of promoting immediate patent reform.—Ald. Sidney in the chair.—Resolutions were passed affirming it to be for the public benefit to promote the growth and publication of new inventions of utility; that the concession in an inexpensive and efficient manner of a temporary property, or patent right therein, is the best method of effecting these objects; and that the Government is bound by its own promises to effect such amendments in the law as are necessary for these purposes, in so short a time (i.e., before the 2d May) as to be available by the provisional registers of new inventions exhibited at the Great Exhibition.—The resolutions were moved by Mr. G. Shepherd, C.E. Mr. Campin, patent agent, and others.

On Thursday evening, the meeting of the United Inventors' Association was held at the Institution of Civil Engineers, to take measures to secure patent reform without delay,—and, from the influential character of the members present, great good may be expected to result.

**EXPERIMENTS FOR PROTECTING IRON VESSELS.**—Mr. Clarkson, of Paris, who recently made experiments with a cork and canvass life boat at Woolwich, and afterwards showed that the material would not splinter, even under Mr. Nasmyth's steam-hammer, made a further experiment a few days ago at Dean and Adams's shooting gallery, to exhibit the advantages of lining iron vessels with cork and canvass, on his plan, by joining the whole together with marine glue. Two plates, each 9 inches square, were prepared, one having a plate of iron an eighth of an inch thick, to which cork and canvass were attached, of the thickness of half an inch. The other was formed of an iron plate one-eighth of an inch in thickness, on which the cork and canvass material was attached half an inch thick, and another iron plate placed at the back. The plates were fired at with solid conical bullets, and with Minié's hollow conical balls, from one of Mr. Adams's new patent rifles, at 33 yards range. The charge for the Minié balls was 1½ drachms of powder to each, and the charge for the conical bullets 1 drachm of powder to each. Five of the Minié balls and bullets entered the plate containing iron on one side only, and three of them went through without any appearance of splinter; seven of the Minié balls and bullets went into the other plate having iron on both sides of the material, but none of them passed through.

**NEW RIVER COMPANY.**—At the Auction Mart, on Tuesday, Messrs. Daniel Smith and Son sold an entire original King's share in the company, producing a dividend of 850l. nett per annum, subject to deductions of 13l. 6s. 8d. per year "King's clog," and 50l. per annum for redeemed land-tax. The New River is divided into only 72 original shares, one-half of which are denominated the King's moiety, and the remainder the adventurers' shares. The share sold was submitted in four parts, which realised respectively 4200l., 4350l., 4400l., and 4400l., making a total of 17,350l. A fixed perpetual annuity of 250l. per annum, secured upon three entire adventurers' and one King's share in the New River Company, subject to 38l. per annum land-tax, sold for 4550l.

**LONDON AND NORTH WESTERN RAILWAY.**—It is understood that the directors will recommend a dividend at the rate of 6 per cent. per annum—leaving about 50,000 to be added to the "rest."

**GREAT WESTERN RAILWAY.**—The balance of receipts over expenditure for the past half-year is said to be 313,000l., and that a dividend of 2½ per cent. for that period will be declared—leaving to next account about 108,000l.

**LONDON AND SOUTH WESTERN RAILWAY.**—The net revenue of this company for the half-year amounts to 181,976l., out of which a dividend of 5½ per cent. per annum will be paid, leaving balance to next account, 8548l. The increase of receipts over the corresponding period of 1850 was 69,113l., while the increase of expenses was only 10,802l.

**EASTERN COUNTIES RAILWAY.**—The dividend to be declared by the directors in this company is expected to be after the rate of 4s. per share.

**RAILWAY CALLS.**—The amount falling due in February is 350,981l.; in the same month last year it was 368,832l.

Arrangements are in progress for the formation of an English railway company in the empire of Brazil, to construct a line from Rio de Janeiro to the interior provinces of San Paulo and Minas Geraes. A special grant has been obtained from the Government, which, with other documents in connection with the undertaking, has been lodged with Messrs. Heywood, Kennard and Co., through the agency of Freeland, Ker, Collings, and Co., of Rio.

**FROME, YEovil, and WEYMOUTH RAILWAY.**—The northern portion of the Wilts, Somerset, and Weymouth Railway was completed from Frome to Cheltenham; and the present company has been formed for completing it on the broad gauge from Frome to Weymouth, through Bruton, Castle Cary, Yeovil, and Dorchester. A capital of 700,000l. has already been expended in the purchase of lands and execution of works between Frome and Weymouth; and the Great Western Company, in whom the whole extent of line has become vested, have agreed to lease to this company their entire interests in the unfinished line for a term of 25 years—they agreeing to complete the line under the suggestions and in accordance with the plans of I. K. Brunel, Esq., to the satisfaction of the Great Western Company, and to work in connection with the Great Western Railway. Contracts have been entered into with highly responsible parties for completing the works in 18 months, after parliamentary sanction has been obtained, for a less sum than the capital proposed to be raised, and for underworking it on such terms as will secure an interest of 5 per cent. per annum, and leave a surplus which, invested at 3½ per cent., will form a sum sufficient to pay off the capital amount at the expiration of the term. If the profits exceed 15 per cent. on the rent, the shareholders participate equally with the lessees in such surplus. The capital is to be 550,000l., in 22,000 shares of 25l. each—of which sum 150,000l. has already been subscribed for; and the placing of 700,000l. in abeyance for 25 years for making a less capital productive, affords in itself a guarantee for the security of the undertaking. Two bills, the one for incorporation of the company, and the other to enable them to take a lease from the Great Western, are now before Parliament, having just proved compliance with the Standing Orders.

**SMEETING IN NEW SOUTH WALES.**—We have received the satisfactory intelligence that the Newcastle Copper Smelting Company have succeeded in producing, at their Burwood works, a quantity of pure copper of first-rate quality from ores imported from New Zealand and South Australia, being, we believe, the first sample of refined copper produced in New South Wales. The works are situated about three miles from Newcastle, in a small glen so surrounded with hills as to form a natural amphitheatre, the area of which abuts on the sea shore at Long Beach. They are erected near to the water's edge, and were constructed and are under the management of Joshua L. Morgan, Esq. A tunnel is excavated in a seam of coal 8 feet thick, lying embedded nearly horizontally under the high ridge forming the north wall of the glen, and the council have passed an act to authorise the formation of a tram-road from the tunnel to the port, which, if carried into effect, will greatly facilitate the transit to and from the works. They consist of a spacious and well built brick building, 150 ft. long by 30 ft. wide, two calcining, two melting, and two roasting furnaces, a refinery, smiths and carpenters shops, &c. Count houses and stores have been provided for, and in the walls of the large building arches are formed to permit approach to the furnaces, by which arrangement the interior where the men are employed is kept comparatively cool. With the exception of the manager's residence and workmen's cottages, the whole works are enclosed within a strong pale fence, probably forming the germ of an extensive establishment. The smelting processes are conducted in reverberatory furnaces, similar to the Swansea establishments, although the peculiarity of the ores renders the details more difficult. Those from New Zealand contain much sulphur and iron, with a low per centage for copper, and are obliged to be preliminarily roasted: those from South Australia are rich, with much silica, little iron, and no sulphur. For the first smelting process a charge of about 24 cwt. is so made up of proportions of the different ores that a slag shall be formed of the iron, silica, and earthy matters, quite clear and free from copper, and that the regulus shall contain as a sulphuret from 55 to 60 per cent. of copper. This regulus, from its great specific gravity, sinks on to the hearth of the furnace, the slag floating on its surface, from whence it is raked out, and the fluid mass below obtained by tapping, in the usual manner. About 3 tons as a charge then undergoes the process of roasting at a red heat for 12 hours, air being admitted to oxidise the iron remaining; the heat is then increased, and the charge fused. The oxide of iron floats on the surface, from whence it is removed, leaving the sulphuret of copper exposed to the action of air and the fire, keeping up a continual decomposition; at a proper time it is tapped into sand moulds as pimpled copper, still containing a portion of iron and sulphur, the separation from which is effected in the refining furnace, from which it is run into cast-iron moulds, either as ingots or tiles. Newcastle is a free warehousing port, within 10 and 20 days' sail respectively of New Zealand and South Australia, from whence the ores are procured. A better site for smelting works could scarcely be found, immediately contiguous to a harbour thus eligibly situated, and in immediate proximity to an abundant supply of coals, obtainable by levels. The company possess every advantage for carrying on their works with great economy, and commanding the markets of China and India for the sale of their produce, for which there is an eager demand.

## COAL MARKET, LONDON.

MONDAY.—Ships at market, 192; sold, 129.  
WEDNESDAY.—Ships at market, 122; sold, 70.  
FRIDAY.—Ships at market, 91; sold, 59.

## Current Prices of Metals, Stocks, &amp; Shares.

METAL MARKET, London, February 6, 1852.

ENGLISH IRON.		TIN.	
Bar, bolt, & square, London	24 17 6-5 0 0	Old copper	287 10 0
Nail rods	5 15 0-6 0	Yellow Metal Sheathing	84d
Hoops	6 12 6-5 17 6	Wetterstedt's Pat. Metal	1 11 0
Sheets (single)	7 5 0-7 10 0	FOREIGN COPPER.	
Bars, at Cardiff & Newport	4 7 6-4 10 0	South American, in bond	78 0 0
Refined metal, Wales	3 0 0-3 5	ENGLISH LEAD.	
Do. anthracite	3 10 0	Pig	16 5-16 10
Pigs in Wales	2 15 0	Sheet	17 10 0
Do. do. forge	2 5-2 10	Pipe	18 0 0
Do. No. 1, Clyde, net cash	1 17 0-1 18	Red lead	19 10 0
Blewitt's Patent Refined Iron	3 10 0	White ditto	25 0 0
for bars, rails, &c., free on board at Newport	3 10 0	Patent shot	21 0 0
Do., do., for tin-plates, boiler plates, &c., ditto	4 10 0	FOREIGN LEAD.	
Stirling's Patent in Glasgow	2 10 0	Spanish, in bond	15 17 6
Toughened Pigs in Wales	3 10-3 15	ENGLISH TIN.	
Staffordshire bars, at the works	5 0 0	Block	4 0 0
Rails (Staffordshire)	5 0-5 5	Bar	4 10 0
Chairs (Clyde)	4 0 0	Refined	4 12 0
FOREIGN IRON.		FOREIGN TIN.	
Swedish	11 0-11 10	Banca, H. C.	4 3 0
CCND	17 0 0	Straits	4 2 0
PSL	17 0 0	TIN-PLATES.	
Gourley	17 0 0	IC Coke	1 2 6-1 3
Indian Charcoal Pigs in London	5 10 0	IC Charcoal	1 7 6-1 8
FOREIGN STEEL.		IX ditto	1 13 6-1 14
Swedish keg	15 0 0	SPELTEN.	
Ditto faggot	15 0 0	Plates, warehouse	15 2 6-15 5
ENGLISH COPPER.		Ditto, to arrive	15 10 0
Sheets, sheathing, & bolts, p. lb.	0 10 0	ZINC.	
Tough cake	88 10 0	English sheet	20 0 0

Terms.—a, 6 months, or 2½ per cent. dis.; b, ditto; c, ditto; d, 6 months, or 3 per cent. dis.; e, 6 months, or 2½ per cent. dis.; f, ditto; g, ditto; h, ditto; i, ditto; j, net cash; k, 6 months, or 3 p. ct. dis.; m, net cash; n, 3 months, or 1½ p. ct. dis.; o, ditto; l, ditto. \* Cold-blast, free on board in London. † Dis. for cash in 14 days, 10 per cent. Pig and bar in Wales, and bar in Liverpool, rule at 3 per cent., and rails in Wales nett.

The IRON MARKET is still without movement; business in all kinds continues limited. Bar is unaltered in price, at 47. 17s. 6d. per ton, in London; orders are taken freely.

**STAFFORDSHIRE IRON.**—There is a moderate amount of orders for shipment, but more business is doing for home consumption.

**SCOTCH PIG-IRON** has been in less demand for speculation; although considerable inquiry has been made, few contracts to any extent have been taken. The best feature in the trade is the certainty of a reduction in the make of pig-iron, which is now rapidly being accomplished by the masters in Scotland; the knowledge of this circumstance will doubtless have a strong tendency to improve prices, which may be quoted as low as 36s.

**SWEDISH IRON** is in limited demand.

**SPELTEN.**—There have been operations in this market to the extent of about 600 tons, partly to arrive and partly on the spot, at 15l. Holders are firmer.

**COPPER** is steady, and without alteration.

**TIN.**—British firm. In E.I., 500 slabs Banca sold at 82s. 6d. prompt cash; with the exception of this sale, the market is rather flat.

**LEAD** is still stationary.

**TIN-PLATES** continue selling in large quantities at low rates. Coke is quoted at 23s. Charcoal 27s. 6d. to 28s. 6d. per box, free on board in London.

**GLASGOW, SEPT. 5.**—The fall in the price of pig-iron appears to be arrested, the market having been steady throughout the last week; any iron offered has been picked up by stray parties, who are convinced that at and under the present rates it is a safe article for investment, as iron cannot be produced except at a great loss, and, sooner or later, the supply must be more regulated by the actual demand than it has of late.

Mixed Nos. good brands, free on board here, store warrants—36s. 6d. per ton.

No. 1, ditto ditto ditto 36 6 "

**MINES.**—A diminished business has been transacted this week in all but dividend mines, and still lower prices again submitted to. The superior attractions of the gold shares must be noted as the sole cause of this change in the aspect of the British market, and the effect, though detrimental to many parties who have ventured largely into crude concerns, will be salutary as regards the general interest of mining. Several discoveries of rich lodes in Cornish mines are announced, and improvements in the yield or quality of ore from others both in Cornwall and Devon. Welsh lead shares are also more generally dealt in.

**In the Bullion Market.**—Mexican and South American dollars, buyers 4s. 10½d. per oz. Bar silver containing gold, all gold above 5 grains in two pound to be paid for, 5s. 0½d. per oz. standard. Bar silver without gold, 5s. 0½d. per oz. standard. Bar gold, 77s. 9d. per oz. standard. Spanish doubloons, 78s. 3d. per oz. Columbian doubloons, 78s. per oz. Fine cake silver, 5s. 5½d. per oz.

**In the Metal Market.**—Copper is very firm in every respect, and with a fair business doing.—Of British Tin the supply is not equal to the demand, and present rates are firmly supported. A parcel of Banca slabs realised 82s. 6d., prompt cash; in other respects the market has been quiet.—Tin-plates are selling freely, and in large quantities, at the price quoted.—Lead remains dormant.

The sale of copper ore at Thursday's ticketing was 4366 tons, amounting to 20,281l. 1s., the average produce and standard being 6½, 113l. 10s. The corresponding sale last month was 2965 tons, produce 7½, 105l. 9s., showing an advance of 3l. per ton.

The ticketing for 100 tons of Foxdale (Isle of Man) lead ore, varied from 9l. 10s. per ton by Sims, Williams, and Co., to 11l. 5s. by Joseph Walker, Parker, and Co.

The ticketings for 100 tons of Laxey (Isle of Man) lead ore varied from Sims, Williams, and Co., 18l. per ton, to Newton, Keates, and Co., 19l. 7s.

At Coed Mawr Pool Mines, they sold on the 31st Jan. 31 tons 13 cwt. of lead ore, at 10l. 10s. per ton. A full report will be found amongst the British Mines.

Tywarthayle Mines sold 57 tons of silver-lead ore on Wednesday, at 15l. 18s. per ton, amounting to 906l. 9s., from the Nancecuke part of the workings, which are looking exceedingly well.

The South Tamar Mines sold, on Tuesday, 70 tons of silver-lead ore, at 17l. 15s. 6d. per ton, to J. H. Meredith, Esq.

Court Grange sold two parcels of silver-lead ore—23 tons to the Tamar Smelting Company at 14l. 13s.; and 8 tons to Newton, Keates, and Co. at 12l. per ton.

Wheal Mary Ann sampled two parcels of lead ore on Saturday last—No. 1, 75 tons; No. 2, 40 tons, computed, for sale on Monday next.

Hingston Down Mines have sampled a parcel of ore, computed 110 tons, of good quality.

At Cwmystwith Mine, they sampled 50 tons of ore on the 2d inst.—the mine looking well. There have been 5 fms. opened in the new discovery, which altogether yielded 15 tons of ore.

The quantity of Tincroft Mines ores, 834 tons, would have reached 1000 tons, but for the weather preventing the dressing of it, particularly at the north mine; the estimate is about 3650l. They have likewise sold two parcels of tin; and in the 110 west, on North Tincroft lode, several branches are dropping into the lode, increasing it in size and value.

Great Polgoth Mine sold two parcels of tin; value about 1225l.

We had the satisfaction last week of adding two of the productive mines to our dividend Share List, where we hope they will long stand, and prosperously, leading the way to several others that we expect shortly will have to be placed among them. The two alluded to are St. Aubyn and Grylls, and Drake Walls.

We understand that at the forthcoming meeting of the Fenton Pottery Coal and Ironstone Company, a dividend at the rate of 10 per cent. per annum upon the first half-year's working will be declared, besides carrying a considerable amount to the reserve fund. This speaks well for the management of the parties concerned.

At Wheal Basset bi-monthly meeting, on Tuesday, the accounts showed—Copper ore sold, 6341l. 14s. 5d.; tin, 996l. 17s. 11d.; sundry disbursements, 17l. 13s. 5d.—7356l. 5s. 9d.—Dues, 489l. 4s. 9d.; labour cost, Nov. and Dec., 2189l. 14s. 10d.; merchants' bills, 983l. 15s. 11d.; income-tax, half-year, 82l. 13s. 6d.; leaving balance of profit, 3610l. 16s. 9d.—deduct South Mine cost, 318l. 8s. 11d.; dividend, this day, 2560l.; leaving balance, 732l. 7s. 10d.; which, with 771l. 18s. 3d. last account, makes 1504l. 6s. 1d. in hand to the next account. Giesler's lode, in the 100 west, is worth 6l. per fm.; the 80 west, 8l.; the 70 west, 7l.; the 60 west, 16l.; the 60 east, 7l.; the 50 west, 25l.; the 40 east, 20l.; the 30 east, 15l. Eight men are sinking the back of the 40, which yields 33l. per fm. Marriot's shaft, sinking under the 40, is worth 15l., and is nearly down to the 50 fathom level. The new north lode in the 70 east is worth 6l.; west, 9l. per fm. At Carnkie, they have six pitches, working at 5s. in 17 tribute; on Lloyd's lode, seven pitches, at 7s. 6d. in the 1l. A dividend of 10l. per share was declared.

At Wheal Sydney meeting, at Plymouth, on the 19th January, the accounts showed a balance in hand of 21l. 16s. 5d. A call of 2s. 6d. per share was made.

At East Seton and Wheal Maud Consols meeting, on the 28th Jan., the accounts showed—Balance from last meeting, 834l. 6s. 8d.; labour cost for Oct., 154l. 1s. 11d.; Nov., 172l. 7s. 8d.; Dec., 139l. 15s. 9d.; merchants' bills, 256l. 8s. 5d.—1557l. 0s. 5d.—By call of 2l. per share, made Oct. 22, 1024l.; leaving balance against adventurers, 533l. 0s. 5d. A call of 1l. per share was made. [A report from Capt. W. Richards, the manager, and Capt. J. Sprague, the agent, will be found in another column.]

At West Wheal Frances meeting, on Tuesday, the accounts for Sept., Oct., Nov., and Dec., were produced and allowed, showing—Balance from last account, 190l. 11s. 2d.; costs and merchants' bills, 627l. 3s. 1d.—817l. 14s. 3d.—By call in Sept., 512l.; leaving balance against the adventurers, 305l. 14s. 3d. A call of 1l. 10s. per 512th share was made.

At the Forest Mine meeting, on the 26th inst., the accounts showed that 386l. 3s. 5d. had been expended on the mine, of which 256l. 10s. 4d. was in the last twelve months. A call of 1l. per share was made. During the last twelve months the adit has been driven eastward about 100 fms., 80 of which are on a fine lode, from 1½ to 2½ ft. wide, composed of gossan, quartz, mundic, &c.

At Wheal Sophia meeting, on the 27th Jan., an account of which we gave in our last, the resignation of Mr. Ward, the late purser, was accepted. The accounts appear to be in confusion. To pay off some debts, a call was made of 10s. per share. The report of Capt. Luke seems of a favourable nature, and a new water-wheel will be ready to fix in about a month hence. At the general meeting in April next, they hope to be enabled to report favourably of the bottom of the mine.

At Wheal Speedwell bi-monthly meeting, on the 26th Jan., the accounts showed—Balance at last account, 539l. 3s. 7d.; labour cost for October, 234l. 6s. 3d.; Nov., 186l. 4s. 8d.; subist to tributors, 87l. 10s.; merchants' bills, 174l. 19s. 10d.; dues, 13l. 0s. 9d.—1235l. 5s. 1d.—Less copper ore sold in Jan., 155l. 16s. 8d.; tin, 34l. 10s. 6d.; call, 512l.; leaving balance to next account, 532l. 17s. 11d. A call of 10s. per share was made. The engine-shaft is sinking under the 30, intending to drive levels in the 45 to come under the lode, which was productive of copper in the 30. The 30, east of Teague's shaft, is yielding large quantities of mundic, with good stones of copper ore. The cross-cut has intersected the north lode 5 feet wide, producing stones of ore. In 10 fms. further driving, they expect to cut the lode wrought on in the adit, which has not been seen under. The tributors are breaking a little copper and tin.

At Wheal Neptune bi-monthly meeting, on the 26th Jan., the accounts showed—Balance from last account, 503l. 2s. 9d.; labour cost, October, 82l. 11s. 8d.; November, 83l. 10s. 11d.; merchants' bills, 50l. 18s. 11d.—720l. 4s. 3d.—Call in November, 512l.; leaving a balance to next account of 208l. 4s. 3d. A call of 5s. per share was made. The engine-shaft is sunk to the 20, and that level extended west 18 fms.; lode yielding mal-leable copper, with a small quantity of black ore; east, 12 fms.; the lode is large, but unproductive. They are about to resume sinking the shaft, to get under the lode making westward.

At Wheal Robins bi-monthly meeting, on Thursday, the accounts showed—Balance in hand from last account, 73l. 10s. 5d.; calls received, 571l. 17s. 6d.; allowance on timber, 6l. 15s.—652l. 2s. 11d.—Paid for water-wheel, 175l. 15s.; Nov. labour cost, 74l. 11s. 8d.; Dec., 90l. 6s. 7d.; paid August bills, 117l. 3s. 10d.; part of Sept. bills, 94l. 11s. 10d.; secretary's salary, &c., 16l. 10s. 10d.; in hand, 83l. 3s. 2d. The balance of liabilities over assets was 327l. 3s. 4d. A call of 5s. per share was made. The chairman said they had taken Trevynna sett for 300l. premium and 1-15th dues, to be called West Wheal Robins, divided into 2048 shares, and distributed *pro rata* among the shareholders, on payment of 4s. per share. The 20 west is easy ground, the lode larger and more ore, letting down much water, showing it is large and open, with a fine mundic back; they expect to find it a good ore lode against the elvan course. The 10 west is 2 feet wide, yielding a little tin in the gossan; the lode has a very promising appearance and likely to make copper in depth, and, the ground being easy, it can be explored at little cost.

At Wheal Chiverton bi-monthly meeting, on the 26th of Jan., the accounts showed—Balance last account, 946l. 19s. 11d.; labour cost, Oct., 121l. 10s. 3d.; Nov., 143l. 8s. 3d.; dues, 11l. 19s. 4d.; merchants' bills, 99l. 0s. 6d.—1322l. 18s. 3d.—Call in Nov., 1024l.; tin sold, 207l. 3s. 4d.; leaving balance to next account, 91l. 14s. 11d. The agent's report will be found among the British Mines. We notice that eight men are raising tin enough to pay the whole cost of the mine.

At South Wheal Trellawny general meeting, on the 31st January, the accounts showed—Balance last account, 96l. 14s. 4d.; cost for Aug. and Sept., 114l. 9s. 1d.; Oct. and Nov., 127l. 10s. 10d.; Dec., 17l. 2s. 10d.—415l. 17s. 1d.—Call in Sept., 396l.; leaving balance to next account of 19l. 17s. 1d. A call of 2l. per share was made; and it was resolved that the purser do, either by himself or through the merchants to whom the mine is indebted, take such legal steps as he or they may deem proper against such of the shareholders as shall not, within two weeks of the present time, have paid up the calls made on their shares on the 13th Sept. last or previously; also that the engine-shaft be sunk 20 fathoms deeper. The very favourable change in the ground in the 60 induced Capt. Dunstan to recommend them to do this, and not to expend more money in the shallow levels, except driving north on the eastern lode—the mine being poor in every other part.

At Wheal Tom bi-monthly meeting, on Thursday, the accounts showed—To balance in hand, 415l. 19s. 11d.; cash, 830l. 5s. 10d.—1246l. 5s. 9d.—Costs for Nov., 359l. 15s. 8d.; December, 234l. 4s. 11d.; merchants' bills, 602l. 5s. 2d.; travelling and office expenses, 50l.—1246l. 5s. 9d. A call of 1l. per share was made. The engine-shaft is down 30 fms. from surface, where they intend driving north and south, to intersect the tin lode. The shaft is set to sink at 10l. 10s. per fm., the deep adit to drive at 2l. 16s., and the shallow adit at 4l. per fm. Here they appear to cut into the main part of the lode 4 ft., with a kindly appearance for making tin.

At the Wood Mine bi-monthly meeting, at Plymouth, on the 28th Jan., a call of 2s. 6d. per share was made, for the purpose of sinking a shaft on the course of the lode, cut 600 fms. north of the old workings, showing a very fine gossan on the back. The old shaft is cleared down to adit, which is 32 fms. from surface. The ground at both ends of the shaft is all taken away, by which it would appear there had been a good course of lead. A pitch is working at 10s. tribute.

At West Wheal Edward meeting, on Monday, it was resolved to prosecute the workings on this mine forthwith; adits can be brought in 30 fms. deep, on lodes showing a rich gossan for copper ore near the surface, and near the junction of granite and killas.

At Wheal Harriet quarterly meeting, on the 24th Jan., the accounts showed a balance against the mine of 447l. 5s. 4d. It was resolved to increase the number of shares from 2560 to 5120, and a call of 5s. per share was made thereon. Messrs. Reid, Bellinger, Smith, Hoppe, and Truscott were elected as the committee of management. The engine-shaft is set to sink below the 40, by nine men, 3 fms., at 26l. per fm.; the 40 west, on the south lode, 4 fms., at 9l. per fm. The 30 cross-cut north, to intersect the new lode, cut down by four men to 10s. per fm., captain's price 80s.; the 30 east, on the north lode, cut down by four men to 2l. 10s. per fm., agent's price 10l. The winze to sink by six men, at 12l. per fm., there being great competition at the survey. The engine works well, the shaft-work is complete, and the materials quite new. They intend fixing a plunger-lift in the 30 fm. level, by which a saving in coals, leather, &c., will be effected.

At Trawanant Mine meeting, on Monday last (a report of which will be found in another column), an estimate of the expense for setting the same to work on the Cost-book Principle was submitted, and approved of; likewise the report of Mr. A. Dean. Specimens of ore from a depth of 30 fms. were exhibited. Capt. Couch was appointed resident agent, and Mr. Gregory chosen secretary.

At Rannaford Coombe Mine meeting, on Jan. 16, the secretary's account showed—November cost, 86l. 14s.; Dec., 91l. 9s. 11d.—178l. 3s. 11d.—Balance in hand last account, 57l. 17s. 2d.; arrears of calls, 24l. 6s.; received from treasurer, 91l. 9s. 11d.; leaving balance due, 4l. 10s. 10d. The treasurer's account showed—Balance in hand from last account, 169l. 12s. 1d.; received for tin sold, 67l. 11s. 4d.; interest, 1s. 1d.—237l. 4s. 6d.—Paid secretary, as above, 91l. 9s. 11d.; leaving balance in hand to next account, 145l. 14s. 7d. It was resolved that the shares of the defaulters should not be absolutely forfeited until the next general meeting, when the resolution, declaring such forfeiture shall be final, and shall not require confirmation at the subsequent general meeting. The workmen are busily engaged about the wheel-pit, lobby, &c. The new wheel is expected to be ready in a month, and double the power of the old one. Some hundreds of tinstuff has been broken ready for stamping, and a similar quantity to the last crushed upon the floors.

At Wheal Wrey Consols, the lode is reported rich for silver-lead ore; at present very shallow, and more vigorous operations are contemplated, so as to develop it 20 fathoms below adit.



At East Daren Mine, the 20, west of Taylor's, is turning out 2 tons of silver-lead ore per fm.; the shaft will be resumed at once. The prospects downwards are very encouraging. The 20, east of Reed's, is again turning out a little ore. Shares have considerably advanced in consequence.

At East Seton and Wheel Maud, they expect to have upwards of 20 tons of good quality copper ore for sale on the 4th March. The engine-shaft is down 22 fms. below adit—lode 2 ft. wide, and kindly. The 20 east is extended 39 fms., through bunches of ore, and coming under the ore ground in the level above, where the present end yields 2 tons per fm.

At West Basset, the lode in the 52, east of perpendicular shaft, is 2 ft. wide, saving work. The cross-cut north, in the 20, has intersected the north lode; they have cut in 2 ft., and no north wall as yet; some exceedingly good ore has been found in it.

At North Basset, the lode in the 82 west is turning out 2 tons of copper ore per fm. The winze from the 72 is in a good lode of yellow copper ore, as is also the 82, west of Miner's. The mine generally is looking well.

At Wheel Gill, the lift is down to the 36, and the water in fork to the 20. A pitch has been set at 13s. 4d. in 17 for copper, and 10s. per ton for jack. The ore is reported of good quality.

At East Tolgus, on North Buller lode, in the adit end east, the ground is harder; the lode is 4 ft. wide, worth 2 tons of copper ore per fm. A couple of men are shooting down a large piece of the tin lode, to ascertain its value.

At Cubert Mine, they have given notice to sample 30 tons of lead ore yesterday. The engine-shaft is sinking in favourable ground. The lode in the 35 west appears to be widening; and east it is driving through a bunch of lead ore—good work. The rise up to the 25 is holed. Henry's shaft is sinking under the 25 fathom level. The tributaries are raising a fair quantity of ore.

At Wheal Peru, they are preparing a parcel of lead and one of gossan ore for sale, to prove the quality. Reid's shaft is down to water; the lode is 5 feet wide.

At Butterdon Mine, they have been obliged to stop working, the water exceeding 500 gallons per minute, owing to the unprecedented influx caused by the late heavy rains. The same complaints are made in a great number of other mines.

At Trelawny Mine, the shaft is down 11 fms. 4 ft. below the 107 fm. level: the increase of water prevents greater progress being made. They purpose stopping Smith's engine on Monday, for the purpose of fixing pit work for the new one, which may take three weeks, by which time they expect the new engine will be ready. The bottom ends are all yielding fair quantities of ore.

At Bat Holes Mine, the 60 south is 4 ft. wide—work of coarse quality. The 48 north is turning out 15 cwt. of lead ore per fm. As soon as the winze is down from the 40, it will lay open an ore piece of ground for 20 fms. long, which will work at a moderate tribute. January sampling is estimated at 50 tons, and a larger quantity expected for February, from the increased number of tributaries now at work.

At Tremar Copper Mine, the new 40-inch cylinder steam-engine, built by Messrs. Thomas and Co., of Charlestown Iron-Works, went to work in capital style on Monday, in the presence of Capt. Peter Clymo and a large body of adventurers in the vicinity.

At Stray Park Mine, a considerable improvement has taken place in the 100, west of the cross-course. The account-day meeting will be held on Friday next, when more particulars will be given.

At Cefn Bruno, the lode has improved in size and quality from the adit to the 24. The estimated quantity of ore discovered is 820 tons, 50 of which is in preparation for market. The 24 west is turning out full 2 tons per fm.; east 1½ ton; but the end at present is disordered.

At Wheal Arthur, the lode in the 35 fm. level is 5 ft. wide, producing a fair quantity of ore. The ends east and west are driving by six men in each, at 37, 10s. per fm. The lode in the winze below is 4 ft. wide, yielding some good stones of ore, looking very promising; nine men are sinking it at 47, 10s. per fm. The 50 north is driving by six men, at 97, per fm., and south by six men, at 77, 10s. per fm. Another parcel of copper ore will be got ready for sale as speedily as possible.

At Prince Albert Consols, the dressing machine will go to work on Saturday next. The lode has been cut through, and is being pursued east and west, with good indications.

At Wheal May, the 20 is driving east by four men, at 47, per fm.; they have passed through some fine branches of ore, indicating well for the level under. Six men are also driving south, to cut the south lode, which they shortly expect to do; they will then cut the plat, preparatory to sinking. The agent is very sanguine as to having a good and lasting mine.

At Great Polgoth Mine, on Saturday last, they set a vast number of pitches to 275 tributaries, at an average of 6s. 7d. in 17. [The report will be found among the British Mines.]

At East Alfred Consols, the men, in cutting through the north lode, laid open a fine-looking lode, more than 3 ft. in width, and producing excellent stones of copper ore.

At Perran St. George Mine, we understand both engines are working well, and after all the expenses incurred in putting the one to work at Devonshire shaft, there will be an available balance in hand of 6007.

We are glad to learn that a rich lode was cut in the 20 fathom level at Wheal Vincent on Wednesday. It is anticipated that the parallel lode to the one cut, lying north, will cut equally rich, and that the valley contains thousands of pounds worth of tin. A steam-engine will be forthwith ordered. Immediately on receipt of the gratifying intelligence, Mr. Crofts convened a meeting of the shareholders, to be held on Tuesday next, when all particulars will be laid before them, also some specimens from the lode, and a report from Mr. Murray.

A deputation of gentlemen interested in North Trelawny have just inspected the mine, and called in several agents of the locality to inspect and report thereon, among whom is Capt. John Lloyd, of Stoke Climsland, whose report will be found in another column. A water-wheel is to be erected forthwith, which, with such a valuable river of water at hand, will enable them to prosecute the concern to a much deeper level than the partial and shallow trial that has been made. The junction of lodes is at 50 fms. deep. The sooner they set about reaching that level the better. The Polgoth Mines' produce of tin in the last month is about 22½ tons. The tribute pitches are looking fully as well as for some months past: the tutwork operations are laying open tribute ground, and have, upon the whole, improved.

Repeated complaints have been made by the mining interest of the low prices paid for copper ores by the smelters at the ticketings in Cornwall and Swansea, and the necessity of the formation of a smelting company, in order that fair rates might be obtained. We have been reminded by a correspondent that a company for this express purpose was formed about five years back, but was not responded to by the miners as might have been expected. The company alluded to is Low's Patent Copper Company, at Penclawdd, near Swansea, who, from not receiving the support they anticipated, have been compelled to purchase at the ticketings.

A meeting of the East Birch Tor Mining Company has been convened, at which the expediency of "winding-up" will be considered.

The Lugal Iron-works, at Kilmarnock, have been suspended, throwing a number of hands out of employ. We are glad, however, to learn that there is a prospect of the company resuming operations.

During the week, shares have changed hands in Devon Great Consols, Alfred Consols, St. Anby and Grylls, West Providence, South Frances, East Tamar, South Tamar, Merilyn, Garreg, Robins, West Caradon, East Buller, Mary Ann, West Ding-Dong, Great Bryn, East Daren, Trelawny, Trannack and Bosence, Wheal Tremayne, Lelant Consols, Wheal Basset, Treviskey and Barrier, Chiverton, Wheal Seton, Stray Park, Busparvo, Trethane, West Wheel Rose, Galt-y-Maen, Wheal Golden, East Wheal Russell, St. Agnes Beacon, Bodmin Wheal Mary, North Trelawny, Cefn Bruno, Cued Mawr Pool, Carnvannal, Tywardreath, Wheal Fanny, Wheal Brewer, Wheal Reeth, Wicklow Copper, and General Mining Company for Ireland.

In Foreign Mines, transactions have taken place in St. John del Rey, United Mexican, and Worthing.

The Copiapo Mining Association held their half-yearly meeting yesterday (C. H. Ellis, Esq., in the chair), the report of which will be found in another column. It appears that the association had suffered considerably from an epidemic among the native labourers, and the recent revolution in the country, all which has been reported from time to time in the *Mining Journal*. The produce of copper during the half-year has been only 257 tons, being 150 tons less than the preceding six months, and 9749 ss. 3d. has been realised for silver and gold during that period. The *Cuba* ass. on the 22d Sept. with 468 tons of copper ore, 30 tons of silver leavings, and 10½ tons of silver ore; and the *Catherine Jenkins* is chartered to load 450 tons more copper ore—so that larger returns are expected in

the present half year, the price having advanced considerably since the last sale made by the company.

The Linars Mining Company have received advices to the 24th Jan., from Mr. Henry Thomas, which will be found among the Foreign Mines. San Anton winze is yielding 1 ton of ore per fm.; the slopes east of it, in the 55 fm. level, 3 tons. La Buena Ventura winze, below the 45, is worth from 3 to 4 tons per fm.; this level, east of Shaw's shaft, 2½ tons per fm. La Esperanza winze is worth 1 ton per fm. The tributaries generally are breaking the usual quantity of ore. Lead ore weighed in, 54 tons 18 cwt.; total in stock, 418½ tons. Pig-lead smelted, 22 tons 13 cwt.; total in stock, 725 tons 2 cwt.

During the past week the tendency to speculate in gold mines has been on the increase. Those most in favour have been well supported, in particular the Agua Fria and Anglo-Californian Companies have been most in demand, in both of which considerable business has been done, with a corresponding rise in prices. The accounts received yesterday from Australia, together with the arrival of a very large amount of gold dust by the *Phenician*, has had a powerful effect on the popular mind. The amount of gold received in Sydney is now about 17,000l. per week, and the value of gold shipped from Sydney amounted to 218,949l. 6s. 3d., and bills are drawn in London against gold at 6 per cent. discount. The market displayed considerable activity, and the advices not only operated on the old companies, but likewise on some of the new schemes. The latest prices are—Australian Auriferous, ½ dis. to par; Anglo-Californian, ½ to 1 prem.; Australian Copper, ½ to ½ prem.; Agua Fria, ½ to ½ prem.; Ave Maria, par to ½ prem.; Golden Mountain, ½ to ½ prem.; Nouveau Monde, 9-16ths to 11-16ths; Mariposa, ½ to ½ prem.; Carson's Creek, ½ to ½ prem.; Colonial Gold, ½ to ½ prem.; Port Phillip, 1-16th to 3-16ths premium; Devon and Cornwall Miners', ½, ¼, to ½ prem.; Australasian, ½ to 1 prem.; Australian Freehold, par to ½ prem.; Lake Bathurst, ½ to ½ prem.

A letter from Vienna says:—"The production of gold in the Austrian States, during the year 1851, has amounted to 7500 marks, or 7,145,550 fl. More than one-half of that amount was furnished by washing the auriferous sands of Transylvania, the rest being taken from the mines of Hungary, Austria, and Moravia. At Weisskirch one piece of virgin gold was found worth 1480 fl."

HULL, THURSDAY.—Our correspondents (Messrs. T. W. Flint and Co.) state that the market for mining shares has been decidedly better during the past week. Among the stocks that have been most prominently firm may be mentioned Chiverton and Lelant, South Tamar may be quoted rather better, Tremayne more offered, Morlyn sellers at 77, and Alfreds are firm at late prices. Gold shares continue to attract attention. There is a disposition to invest in these, if anything approaching to the results promised should be realised.

The transactions in Bank shares during the week have been confined to a few descriptions, and prices are well supported. The sales recorded are—British North American, 48; Colonial, 12½, 11½ ex. div.; London and Westminster, 29½, 30, 29½, 2, ex. div. and bonus.

In Dock shares the only incident to be noticed is a further advance in East and West India Dock shares. The transactions have been—East and West India Dock stock, 145 ex. div.; London, 121 ex. div.; and St. Katharine, 82.

Peninsular and Oriental Steam shares are a shade lower, being quoted 68, and the New, 17½. Royal Mail Steam are also less firm, being 76½ to 77½. General Steam Navigation Company are 28½, 28.

In Insurance shares prices remain unaltered, except Law Life and Legal and General Life, which are a shade higher. The latest quotations of the market are—British Commercial, 6½; Church of England, 3½; Clerical, Medical, and General, 27½; European Life, 12; Medical, Invalid, and General, 24; National Loan Fund, 2½ ex. div.; Professional Life, 4; Provident Life, 30; Rock Life, 6½; United Kingdom, 4; Victoria Life, 5, 5½.

The General Reversionary and Investment Company's shares are quoted 94; London Reversionary, 42; Reversionary Interest Society, 101 ex. div.

Amongst the Miscellaneous shares we noticed for the first time the Trust and Loan Company of Upper Canada. Others are quoted—Australasian Agricultural, 20; Australian Trust, 20½, 21; Price's Candle Company, 23; South Australian Company, 23½.

It is in contemplation to extend the line of steam navigation now in operation to the Isthmus of Panama thence to Sydney, and thus the great central American route to Australia will at length be perfected. The scheme is promoted by Capt. C. E. Mangles, managing director of the West India Mail Company, and although the enterprise will not be started by the Royal Mail Company, it is believed many of the directors are individually interested, and that it will be carried out in concert with the Pacific Steam Navigation Company of Liverpool.

The Eastern Archipelago Company have addressed to Mr. Hugh Fleming, secretary of the Manchester Commercial Association, a circular, with a chart extending from the Cape of Good Hope eastward to Cape Horn, exhibiting the advantageous position of Labuan with reference to an export trade in coal from that island to India, China, Australia, or California; and also transmitting copies of reports on the quality of the coal supplied to the Peninsular and Oriental Company from the mines of the Eastern Archipelago Company at Labuan.

Mr. Jackson Barwise, C.E., with two assistants, and 12 Cornish miners, sent out by the Ave Maria Gold Mining Company, left England by the *Orinoco* to proceed to California, to commence operations. The *Orinoco* also took out for the same company a large quantity of powerful steam machinery and crushing apparatus for extracting the precious metal from the quartz rock, accompanied by competent engineers to erect and set it to work on the Ave Maria and San Carlos Mines, leased by the company. This party of miners will proceed to Greytown, and go thence by the Nicaragua route to San Francisco. This steamer has also 1000 bottles of quicksilver, value 10,400l. sterling.

Among the list of patents in our present Journal will be found one granted to our correspondent, Mr. William Longmaid, for improved apparatus for obtaining gold. As the patent was only sealed on the 30th January, we are, of course, not in a position to describe the principle, but expect shortly to be able to lay the particulars before our readers.

A subscription has been commenced in order to present to Mr. Hensman, the superintendent of machinery in the Great Exhibition, and now engineer to the Bank of England, a suitable testimonial of respect for his services; and several of the most eminent engineering and mechanical firms in London, Manchester, Leeds, and other large towns, have subscribed very handsomely to it.

TIN BOUNDS.—In the Vice-Warden's Court, on Tuesday, a case at common law was tried, in which the plaintiff (Hawke) sought to recover for 4-16th parts of the bounds of Tolcarne tin lode, worked by the West Wheal Jewel adventurers. The case was very complicated, principally depending on the construction of the will of C. T. A. Bawden, who died in 1794, and subsequent assignments. The defendants pleaded that they had paid 28l. 3s. 4d., all that was due, to the court; but Mr. Stokes claimed either 1-24th, 45l. 1s. 3d., or 1-15th, 72l. 2s. 6d. The jury found a verdict for the former amount, and that the renewals of bounds from 1824 to 1837 had been in favour of plaintiff and C. T. A. Bawden.

## LEAD ORES.

TICKETINGS FOR ABOUT 100 TONS LAKET LEAD ORE.

Bidders.	Douglas, Isle of Man, Jan. 31.	Tenders per ton.
Newton, Keates, and Co. (purchasers)	19 0	0
John P. Eytton	19 0	0
Walker, Parker, and Co.	18 0	0
Mather and Co.	18 0	0
Locke, Blackett, and Co.	18 0	0
Tamar Smelting Company	18 0	0
Sims, Williams, Nevill, and Co.	18 0	0

TICKETINGS FOR ABOUT 100 TONS FOXDALE LEAD ORE.

Bidders.	Douglas, Isle of Man, Feb. 4th.	Tenders per ton.
Walker, Parker, and Co. (purchasers)	11 5	0
Mather and Co.	11 5	0
Newton, Keates, and Co.	11 0	0
Richardson and Co.	10 18	0
J. F. Eytton	10 17	0
Pontifex and Wood	10 0	0
Locke, Blackett, and Co.	9 12	0
Tamar Smelting Company	9 10	0
Sims, Williams, Nevill, and Co.	9 10	0

Sold at Aberystwith, on the 2d February.

East Loggias	55	11 1	0	Walker, Parker, and Co.
Ditto	55	11 0	0	Walker, Parker, and Co.
Frongoch	20	10 10	0	Ditto
Grainoch	20	10 8	0	Ditto
East Daren	43	15 3	0	Ditto
Ditto	45	15 3	0	Ditto
Cwm Erfin	36	14 2	0	Ditto
Level Newydd	32	10 8	0	Ditto

Sold at the Mine.

South Tamar	70	17 15	6	J. T. Treffry's Exrs.
Great Wheal Baddern	18	13 2	6	R. Mitchell and Son.
Ditto	30	10 16	6	Ditto

BIDDINGS FOR SILVER-LEAD ORE FROM COURT GRANGE MINES.

Sold at Aberystwith on the 30th Jan.

Bidders.	Penycuif—23 tons. Lletty-hau—6 tons.
Tamar Smelting Company (purchasers)	14 13 0
Newton, Keates, and Co. (purchasers)	13 7 6
Sims, Williams, Nevill, and Co.	14 8 0
Locke, Blackett, and Co.	13 12 0
Walker, Parker, and Co.	12 0 0

**ASSAY OFFICE AND LABORATORY, 23, HAWLEY ROAD, KENTISH TOWN.**—conducted by Mr. MITCHELL, F.C.S., author of "Manual of Practical Assaying," &c.—Mr. MITCHELL begs to inform the Mining and Manufacturing Public, and Bullion and Metal Brokers generally, that he continues to conduct ASSAYS and ANALYSES of MINERALS, METALS, SOILS, FURNACE and all other MANUFACTURING PRODUCTS.—ADVICE TO PATENTERS and MANUFACTURERS on all MATTERS involving a knowledge of Chemistry.

INSTRUCTION, as usual, in ASSAYING, ANALYSIS, and METALLURGICAL and MANUFACTURING CHEMISTRY.—23, Hawley-road, Kentish Town.

## COPPER ORES.

Sampled January 14, and Sold at Swansea, February 3.

Mines.	Tons.	Prod.	Price.	Mines.	Tons.	Prod.	Price.
Berehaven	110	10½	£8 8 6	Cuba	109	16	£13 8 0
ditto	104	11½	9 8 6	ditto	90	16½	13 11 0
ditto	92	11	9 0 6	ditto	71	16½	13 8 6
ditto	87	10½	8 12 0	ditto	69	22½	19 3 6
ditto	84	10½	8 12 0	ditto	57	23½	18 14 0
ditto	22	10½	8 14 0	ditto	32	24	18 10 6
ditto	4	10½	8 10 6	Knockmahon	82	8½	7 8 6
Cobre	96	18	14 14 6	ditto	70	8½	6 16 6
ditto	85	18	14 14 6	Sydney	45	12	12 10 1 6
ditto	66	25½	30 19 6	ditto	7	12½	10 0 0
ditto	52	24½	30 13 6	ditto	3	18½	16 12 0
ditto	48	24	30 5 0	ditto	2	16½	14 1 6
ditto	45	24½	30 3 6	Kaw-aw	38	10½	8 0 6
ditto	21	17½	15 1 6	Ballymurtagh	36	4½	3 15 6
ditto	20	20½	17 1 6				

## TOTAL PRODUCE.

Berehaven	473	£4174 0 0	Sydney	57	£598 6 6
Cobre	434	7673 1 0	Kaw-aw	38	304 19 0
Cuba	448	6985 11 0	Ballymurtagh	36	134 18 0
Knockmahon	152	1074 6 0			

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
English Copper Company	134	£1598 11 3
Freeman and Company	92	830 6 0
Grenfell and Sons	241	3051 17 6
Sims, Williams, and Company	109	2029 4 0
Vivian and Sons	196	2208 10 0
Williams, Foster, and Company	83	1419 15 0
Mines Royal	215	780 12 0
English and Australian Company	73	1477 9 9
Low's Patent Company	576	7585 10 0
Total	1638	£20,945 1 6

## AVERAGES.

Produce.	Price.	Standard.
British	9 15-16	£8 2 6
Foreign	19½	15 18 6
Sale	15½	12 15 6
Totals—British 661; Foreign, 977	1638 tons (21-cwts.)	£96 11 0

## AVERAGES OF LAST SALE.

Produce.	Price.	Standard.
British	10½	£8 12 6
Foreign	16½	12 17 6
Sale	13½	£10 17 0
Totals—British, 495; Foreign, 666	1161 tons (21-cwts.)	£95 4 6

## COPPER ORES.

Sampled Jan. 21, and Sold at Andrew's Hotel, Redruth, Feb. 5.

Sampled Jan. 21, and sold at Andrew's Hotel, Reuruth, Feb. 5.					
Mines.	Tons.	Price.	Mines.	Tons.	Price.
Tincroft.....	102	£2 13 0	Wheal Basset ....	72	£3 4 0
ditto	80	4 6 6	East Pool .....	23	2 8 0
ditto	68	2 17 6	ditto	66	2 8 0
ditto	67	2 18 0	ditto	65	2 12 0
ditto	65	4 1 0	ditto	58	4 14 0
ditto	61	3 13 0	ditto	41	4 10 0
ditto	60	7 13 0	ditto	25	1 2 0
ditto	58	5 19 0	East Wh. Crofty ..	59	5 13 6
ditto	51	2 3 6	ditto	51	6 6 0
ditto	50	6 1 0	ditto	38	2 6 0
ditto	47	6 1 0	ditto	26	4 11 6
ditto	45	5 13 0	ditto	23	1 8 0
ditto	42	6 6 6	ditto	12	0 16 0
ditto	38	5 6 0	Dundane .....	22	6 16 6
North Pool .....	105	3 19 6	Camborne Veau ...	70	4 3 0
ditto	100	2 3 6	ditto	30	1 14 0
ditto	85	2 19 0	Wheal Francis ..	65	5 19 0
ditto	79	4 3 0	ditto	44	3 16 0
ditto	71	3 12 0	ditto	20	1 17 0
ditto	60	1 15 0	Fowey Consols ...	76	6 7 6
ditto	59	4 3 0	ditto	75	6 9 6
ditto	50	10 1 0	ditto	71	1 19 0
ditto	40	3 1 0	South Wh. Frances	61	7 7 0
ditto	15	1 6 6	ditto	55	7 5 6
Wh. Seton .....	109	4 7 6	ditto	49	6 19 0
ditto	80	5 5 0	ditto	41	7 17 6
ditto	74	5 7 0	Condurow .....	56	2 19 6
ditto	64	4 3 0	ditto	53	5 6 6
ditto	55	4 3 6	ditto	37	5 17 0
ditto	54	2 19 0	ditto	30	1 19 6
ditto	50	2 16 0	ditto	25	1 2 0
ditto	47	4 15 6	Dolcoath .....	49	4 17 0
ditto	38	2 12 0	ditto	42	3 1 0
ditto	34	3 1 0	North Roskear....	45	10 11 0
ditto	19	3 8 0	ditto	25	5 7 0
Wheal Basset ....	78	6 14 0	Pendarves Consols.	26	3 1 0
ditto	66	3 5 6	ditto	11	0 15 0
ditto	64	3 3 6	ditto	10	8 2 0
ditto	63	4 15 0	Wheal Vayryan....	15	5 19 0
ditto	62	3 5 6	ditto	8	6 2 6
ditto	61	5 9 6	Gustavus Mines ...	22	4 17 6
ditto	55	5 17 6	Wh. Mary, Redruth	17	2 16 6
ditto	50	5 16 6	ditto	3	1 0 0



## NOTICES TO CORRESPONDENTS.

- B. B. (Tyrone).**—All information respecting the Museum of Economic Geology can be obtained by addressing Mr. R. Hunt, at the Institution, Jernyn-street, St. James's.
- W. A. A.**—Although we admit there is much truth in our correspondent's remarks, still we cannot control "the powers that be," and are compelled to seek the particulars from the quarters named in our last, for want of any other source that can be relied on. We have already observed there is a vast disparity in price between buyer and seller; share jobbers have been known to offer shillings and ask pounds for shares in the same concern. We could name instances of this during the present week.
- LEADING CHEMISTS OF EUROPE.**—To the list published in the Journal of the 24th Inst., we have to add the names of Graham, Gmelin, Rammsberg, Wöhler, Hofmann, Pelouze, Plattner, Will, Boussengault, Müller, and Löwig.
- WIRRAL MARY EMMA.**—The insertion of the letter of an "Old Adventurer" is not necessary after the notice in last week's Journal. Capt. Heath will, of course, have attended the meeting, and preferred whatever claims he had against the sett. If they be reasonable, we have no doubt an amicable settlement will be effected.
- TIN IN ELK'S HORNS.**—Mr. Ennor is at a loss to know whether the remarks by Mr. Couch in the Journal of the 24th Jan., that "the horns were found in the tin bed, and the bones in the mud below were calcareous," is intended as an answer to his previous queries on the subject; and if so, he thinks it is not such an one as ought to be expected from a geologist's society. Mr. Ennor thinks every information should be given,—under what circumstances the transmission into tin took place, and what proportion of metal was contained in it; and wishes to know if Mr. Couch tested the outer surface of the horn, or did he remove the outer scale, and experimentalise on the inner parts; and whether the society will allow a portion to be taken off, and fairly assayed, or this interesting subject may remain unsatisfactorily explained. As Mr. Ennor appears still doubtful as to the propriety of calling horns "Irish elk horns," when found in Cornwall, we must inform him that the name is given to a peculiar species of elk, indigenous to Ireland, belonging to one of the family of which the horns in question doubtless formed a part; and, consequently, wherever found, the cognomen is quite appropriate.
- NORTH TREASURY.**—We have not, as noticed by our Irish correspondent, received any report from this mine since 13th December last, although the shares (16,000) are stated to have changed hands at 3s. 6d. and 4s. each, which, as our correspondent states, does appear a high figure for a concern not yet selling ore.
- THE CALIFORNIAN AND AUSTRALIAN GOLD COMPANIES.**—We continue to receive many communications, recommending some, and running down others, of these several undertakings, but as it is invidious in public journals to notice favourably one enterprise at the expense of another, we must decline their insertion, as the public who have capital to embark have every means of diligent enquiry before they invest or speculate. One correspondent, "The Guide," in calling attention to the two classes of companies, considers both safe, but the Australian more a question of time as nothing can be received as dividend from thence for 18 months, while probably the Californian adventures will commence paying dividends in and after next June. California may have the start, but self-interest should lead us, we think, to our own colony in preference, in which there is every promise of immense future success.
- T. H. H. K.**—The brokers advertising in the Mining Journal Californian and other gold shares would furnish the information required. They are members of the Mining Exchange, which is quite distinct from the Stock Exchange. Any member of the latter would transact business in the gold shares, if applied to.
- C. M. (Southampton).**—Wheel Grenville is quite a distinct sett from that of West Wheel Grenville. The former is in 6000 shares, 1100 of which were forfeited and sold by public auction on January 28th at 15s. each. The management is now placed in the hands of Messrs. John Taylor and Sons; it lies immediately west of South France and other dividend-paying mines. As regards West Wheel Grenville, we must refer our correspondent to Messrs. Foster Brothers.
- TAN "ARTIZAN."**—In treating the "Irish Difficulty," the writer overlooks the fact mentioned by Prof. Solly, that the process of Clausen's flux cotton was recorded by the Society of Arts 75 years ago. An article on "The Smoke Question" advises lining furnaces with fire-brick, because of its valuable property when heated, in "its operation as a smoke consumer"—a fallacy which we thought had been long exploded. There are several excellent papers in the present Number, and an interesting large engraving, giving details of the engine and boilers of the Great Britain.
- A Roller (Dundee).**—We are not sufficiently initiated in Vulcan's art to know every provincial form for every peculiar kind of rolled iron. We do not know any by the name he mentions.
- P. A. (St. Luke's).**—The water contained in the boiler being maintained in a state of violent ebullition, a spray is thrown up from the surface which mixes with the steam. If the steam space is not high enough to allow this spray to subside, it will be carried into the cylinder, and having none of the mechanical efficiency of steam, will expend heat without a corresponding useful effect. This is called "priming."
- The papers in course of publication on the Mineral Features of Connemara, Ireland, are by Mr. Pierre J. Foley, son of our old and respected correspondent, Mr. St. Pierre Foley,—from whom, by the bye, we should be glad more frequently to hear.
- Fair-Play (Cornwall).**—The insertion of the communication would produce no particular result. We, however, admit that the writings of the party he so liberally praises are occasionally pleasing to read, but do not agree with him that those of the person he abuses for communicating under an assumed name is "a compilation of twaddle;" on the contrary, his letters, though short, generally contain sound practical sense, conveyed in a pithy and condensed form.
- Artisettes (Spartan).**—The following are the average dimensions generally adopted by our most experienced boiler makers. For every cubic foot of water to be evaporated per hour, there should be one square foot of grate bar, three cubic feet of furnace space, one square yard of heating surface, 10 cubic feet of water space, 10 cubic feet of steam space, and five square feet of water surface.
- In a lecture on Electro-Metallurgy, delivered before the Bank of England Literary Association, Mr. Alfred Smee expressed his belief that "if ever a battery should be discovered, in which coke can effectively take the part of zinc, then will the steam-engine give way to the electro-magnetic machine."
- D. D. (Aberystwyth).**—The pressure of the atmosphere at the level of the sea will support a column of water of about 31 feet, but varies with the state of the weather; for certainty in action, it is desirable not to have the bend of the syphon above the surface of the water, in which the shorter leg is immersed, more than 30 ft. If the situation is above the sea level, this height must be reduced in the proportion of about 1 ft. for every twelfth part of an inch difference in the mercury in the barometer between the two levels.
- T. A. (Trinity-street, Bristol)** enquires "how many mines were worked by the Southern and Western Mining Company of Ireland, and how it was expended some 25,000l. without any profit, &c.?" We find, from the prospectus advertised in November, 1845, that the offices were No. 80, South Mall, Cork; Mr. W. Connell was the secretary, and Mr. Jameson, 4, South Mall, the solicitor. Beyond the announcement that this company arose out of the preliminarily formed "West Garbary and County of Cork Mining Company," and that it was promoted for working mines in the south and west of Ireland, we have no information, and shall feel obliged to any correspondent who can supply us with any details, as many enquiries are now being made relative to the mineral development of those districts.
- MA. D. Mueset versus "THE ARTIZAN."**—The editor of the Artizan presents his compliments to the editor of the Mining Journal, and requests the insertion of the accompanying paragraph, from the Artizan, in reply to Mr. Mueset's communication:—"Our attention has been called to a series of letters in the Mining Journal, under the signature, D. Mueset, in which the writer attempts to deny the correctness of an opinion expressed by the conductor of this Journal in 1844, on the inventions of Mr. Craddock. With the correctness or incorrectness of that opinion we will not now deal; we may, perhaps, do so on a future occasion. There is another point, however, (not at all affecting that opinion, which we should like to clear up.—Mr. Mueset states that Mr. Craddock, denouncing to the opinion so expressed, 'replied in his usual dispassionate style.' This answer did not appear, neither any usual notice to correspondents; but Mr. Craddock received a private note from the editor, stating that 'on the remoteness of M. his answer should be inserted.' If this means anything, it means that the editor of this Journal required a bribe of 5l. to induce him to give insertion to an article, the tenor of which was contrary to his convictions. As the present conductor had, at the time mentioned, no connexion with the Artizan, it is impossible for us to do more than disclaim any knowledge of the note in question, nor, in fact, any obligation on what might have taken place eight years ago. We have only, therefore, one request to make (and from the courtesy displayed in Mr. Mueset's communications, we feel sure that he will oblige us), which is, that he will publish the whole of the note, of which he gives what purports to be an extract. We trust that it will throw some light on the subject."
- [In fairness, we have felt bound to insert the foregoing paragraph; but having seen Mr. Craddock, and had an opportunity of examining several documents in reference to the transaction alluded to, we do not hesitate to assert, that the reply of Mr. Craddock to the attack on his invention in the Artizan should have been published—being only the ordinary length of an article in that publication, say three columns and a half, and entirely referring to the merits of the invention.]
- Mr. Mueset, on the Universal Condensing Engine; Mr. Biram, on the Anemometer; Mr. Pierre J. Foley, on Mining in Ireland, shall appear in next week's Journal.
- We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses—not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.
- It is particularly requested that all communications may be addressed—

TO THE EDITOR,

Mining Journal Office,

26, FLEET-STREET, LONDON.

And Post-offices orders made payable to Wm. Salmon Mansell, acting for the proprietors

THE MINING JOURNAL.  
Railway and Commercial Gazette.

LONDON, FEBRUARY 7, 1852.

The Mining Journal is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

In last week's Journal we briefly noticed the system of rating copper and other mines in Ireland to the poor's rate, while in England they are exempt, and we are now in possession of the memorial there alluded to as having been forwarded to Sir WILLIAM M. SOMERVILLE, the Secretary for Ireland, by the Mining Company of Ireland. The board of directors had previously obtained an interview on the subject of the various restrictions to the working of mines in Ireland, when Sir WILLIAM requested them to address any further remarks which might assist him in the laudable endeavour to encourage the working of Irish mines, and thereby create addi-

tional employment for the labouring population. In their memorial, they state that the company, in two cases, are unable to work mineral properties, from the difficulties in obtaining possession of mine grants, where a sufficient right of entry has not been reserved by the landlord—one under Sir H. W. BARRON, in Waterford—the other from the late Mr. BENNARD, J.P., in Wexford. In the first of these cases, Sir HENRY offered to grant his tenant one-third of his royalty—the company also paying him 40l. down as an instalment of the sum of 1000l., the remainder to be paid out of proceeds. The tenant refused these eligible terms, and required 100l. at one payment in advance, and insisted on the condition that all stuff should be removed as raised, which the directors, as trustees for the shareholders, could not possibly agree to. In the other case the tenant denied the right of the landlord to enter the land, and having brought an action for alleged damages by the company's operations, he succeeded in getting a verdict for an amount far beyond the value of any ground which could have been injured. They state that the regulations for valuing mines on which to levy poor's rate are vague and indefinite; different boards of guardians, adopting different methods, and assisted by valuers, who know nothing of mining operations, decide upon imaginary values, without reference to the rent paid—the result being that the directors are continually harassed by necessitous appeals to the Assistant-Barrister, in which they generally succeed, thus showing how unjust is the rating, and how much fairer it would be to fix the mode of valuation on a uniform and settled basis. To show the hardship of the case, they state that in working the Laganure Mines, for instance, in the county of Wicklow, for the last 26 years at a loss, and after expending 6000l. in exploring the sett, they are called upon to pay poor's rate on the profit which the guardians show they are now making; and on an appeal to the barrister, the magistrates all considered that, as the law stood, they must be taxed on the amount now produced from the mines, and refused to go back into previous years, in which it was shown the company had lost heavily by its mining operations. It appears hard that mines in Ireland should be thus unequally taxed, when compared with those of England; and it is seriously felt by the proprietors in the Mining Company of Ireland, who, after having been in operation 28 years, and after an expenditure of nearly 2,000,000l. sterling in giving employment to the poor of Ireland, having paid only a small dividend for nine years, and during the past five years nothing, are called upon to pay an exorbitant tax, from which their more wealthy neighbours here are exempt. We sincerely trust their memorial and these remarks may rouse attention in the proper quarter, and that every reasonable encouragement may be given to the working of mines in Ireland, where continuous sources of employment are so desirable.

A question of considerable importance was brought under discussion at the monthly meeting of THE BANKING INSTITUTE, on Tuesday, when there was a much more full attendance than usual, Sir MOSES MONTEFIORE, Bart., F.R.S., being in the chair. Mr. DALTON, the honorary secretary, read a paper "On the recent Discoveries of Gold in California and Australia, and its probable effect on Commerce and the Currency," which was illustrated by numerous interesting specimens of virgin gold from both countries, among which were three splendid pieces, weighing, probably, 14 or 15 lbs., portions of the monster lump of auriferous quartz found by a native Australian servant of Dr. KERN, on his land at Merinda Creek, in July last, weighing 300 lbs., and which produced 106 lbs. of pure gold. On commencing the paper, Mr. DALTON said he had been requested to bring together a few important facts as to these extraordinary discoveries, and which would lead them to a clear investigation of the changes which would ensue, and what might be expected to be the effect on the price of provisions and labour, the interest of money, and the currency generally, should gold continue to be found and thrown into circulation, to the extent that all the accounts hitherto received would lead us to expect. Through the courtesy of the Australian banks, Messrs. MATTHEWSEN, of Coleman-street, and Mr. DAVIES of Gracechurch-street, who had received large consignments, they had been enabled to place on the table as fine a collection of these specimens as probably could be found in London. The paper then proceeded to give an historical relation of the discoveries of gold in Wicklow, about half a century since, those of California and Australia in succession; and Mr. DALTON read extracts from Capt. ESKINE's recent pamphlet and several periodicals, which facts have all appeared in our columns.

From all these data, Mr. DALTON had no doubt the production of gold was largely on the increase, which, if it did take place, and its standard value decreased, he believed the consequence would be an extension of the circulating medium, a diminution in the amount of discount, reduction of the rate of interest, and an increase in the price of provisions and labour. Some writers on the currency contended that a depreciation in the standard value of gold would make no change in any of the cases mentioned; but he contended that, if for instance the value of gold was reduced one-half, it would require two sovereigns to purchase the same quantity of commodities which would have previously cost only one—in fact, it would have a similar effect on the currency as the undue issue of Bank notes had in 1810. The paper then showed the depreciating effect it would have on the income of the fundholder and persons with fixed incomes, although it was allowed the change would be gradual, and every individual would in some measure be remunerated by sharing in the increased public prosperity.

Mr. TENNANT produced several very beautiful specimens of virgin gold from the Brazils and Australia, and a diamond in its rough state, adhering to a dark-coloured stratum, in association with gold from California. He believed that the gold-seekers were overlooking many substances more valuable than even gold; for although much of this peculiar strata had been discovered, he believed no precious stones had yet been found. In 1825, during the mania for gold, shares in gold mining companies bore enormous premiums, and all were to make fortunes; but a reaction ensued, large capitals were unprofitably expended, and much ruin and lamentation was the result. He feared such would be the case at the present day with many of the Californian and Australian companies; he did not wish to discourage enterprise or mineral discoveries, but merely to throw out a little necessary caution. He deplored the fact as a kind of national disgrace, that so few persons went out to our colonies who took the pains to instruct themselves in the first elements of mineralogy and chemistry, though now so easily attained, which accounted for our long habitation of a gold region without its being known until so recently. With respect to a superabundance of the precious metal, he said fears were groundless; it would only make up for deficiencies occurring in other gold-producing countries. In Siberia, for instance, gold-seeking was now a losing game, every pound's worth costing about 22s. to obtain it. In Wicklow, the poor people still found gold in the mountain streams, and about 40000l. worth a year was sold in London and Dublin from that locality. They were left unmolested in their pursuits, as the Government had proved extensive arrangements would not pay, and he feared this would be found to be the case with much costly machinery, which was now being constructed in this country. The population of the world was also increasing 1000 per day, and a constantly enlarging demand for gold must be the result.

Mr. CATHERWOOD, who had recently arrived in England from California, gave some interesting details of the nature of the country; and with respect to a very flattering picturesque view of one district which hung up in the room, and had been furnished by one of the Mariposa companies, this gentleman could not at all recognise the likeness. He said the quartz veins cropped out from the beds of the rivers, running up the mountains, and continued into the opposite valley; they varied from 2 in. to 2 or 3 ft. in width, but the narrowest generally were the most productive. Beneath the alluvial soil, which yielded gold, they came upon decomposed slate, also producing gold, and beneath which was the granite, the primary rock of the district. Although out of 200,000 persons whom he estimated to be now gold-seeking in California, some were, of course, more fortunate than others, he considered the average gettings to be about 7s. per man per day. Half of them spent a very large portion of their time in "prospecting," or searching for lumps, instead of steadily pursuing the more certain operation of washing the soil.

Mr. NEWMARSH said he considered there was little fear as to any mis-

chievous interference with the currency. There were, doubtless, large quantities of gold, but he thought many of the calculations and expectations enormous and exaggerated, and that it would little more than meet our commercial wants. He could make no more than 26,000,000l. as the total quantity of gold exported from California in four years, of which amount 19,000,000l. had been merged in the currency of the United States, leaving only 7,000,000l. for introduction into Europe. Whatever change did take place it must come gradually.

J. W. GILBERT, Esq., perfectly agreed with the last speaker, that any change must come gradually. Whatever might be the influx of gold, it would be in a great measure neutralised by increased exportation of manufactures, importation of foreign commodities, and a regular interchange would go on in a continuous circle. To show that many of the theories of currency laid down by such writers as Col. TORRES, RICARDO, &c., were erroneous, he instanced the present period, with an immense amount of bullion in hand by the bank and in circulation, provisions were cheaper than they had been for half a century. Besides, new channels might be opened for the employment of gold; we may have more gold watches, and many articles, such as spoons, forks, and other description of plate, be manufactured from it, which had hitherto been generally made from other materials.

We understand that the Governor of the Bank of England intended to have been present, but was prevented by an important engagement. The discussion appeared to create great interest to a crowded audience, and thanks having been voted to the chairman, the company separated.

We briefly noticed in our last Journal that it had been determined to establish evening lectures at the MUSEUM OF PRACTICAL GEOLOGY for artisans only, and such determination reflects great credit on the professors and officials in the establishment, who have so readily come forward to aid in carrying out the plan, and giving an opportunity to working men of greatly increasing their general knowledge and encouraging those habits of observation and improvement, on which the development of genius and future character so much depend. As the daytime of the mechanic is so fully employed, it has been wisely determined to deliver these lectures at 8 o'clock in the evening; commencing on Monday next, by Dr. LYON PLAYFAIR, on "Glass and its Composition;" on Feb. 16, Prof. FORBES on "The Utility of Collecting and Exhibiting Fossils;" on Feb. 23, "Photography and its Applications," by Mr. ROBERT HUNT; on March 1, Professor A. C. RAMSAY on "The Utility of Geological Maps;" March 8, W. W. SMYTH, M.A., on "The Mode of Occurrence of Metals in Nature;" and Monday, March 15, Dr. PENNY on "Iron."

Mr. ROBERT HUNT, in his introductory lecture to the course on mechanical science, strongly dwelt on the importance of cultivating habits of observation, and there is, probably, no means which could have been devised better adapted to turn the contemplative mind of the artisan and mechanic into the right path; who having once tasted the sweets of patient and thoughtful research, will be led to more persevering efforts to penetrate still further into the scientific mysteries of Nature; while the arts will be enriched, and the public benefitted by the results. In the address above alluded to, Mr. HUNT has beautifully traced the effects of careful habits of observation; facts, frequently returning, solicit attention; new features, by close attention, are discovered; results which had long escaped casual and heedless glances are developed, and the mind is thus led up to the inquiry after the exciting cause. True science now begins, and the evidences of experiments are sought; a philosophical method is eventually developed, and its operations are displayed in the careful classification of observed phenomena, in the consideration of which the human mind necessarily demands the assistance of theory; and as this is constructed in accordance with true observation, or in obedience to the exuberant thoughts of an imaginative mind, so is the discovery of truth accelerated or retarded. The history of every science proves that human progress is dependent on careful observation; the devious and uncertain wanderings of the astrologer, the alchemist, and the cosmogenist, exhibit the severe struggles of truth through the mazes of imagination; while the advances made in astronomy, chemistry, and geology, are expressive of the advantages of working diligently, with a system of observation for our guide, and waiting patiently the development of truth.

Dr. LYON PLAYFAIR, also, in his introductory lecture concludes by emphatically insisting on the indispensability of the artisans of this country having a scientific education in connection with manufactures, if we wish to outstrip the intellectual competition which now, happily for the world, prevails in all departments of industry. As surely as darkness follows the setting of the sun, so surely will England recede as a manufacturing nation, unless her industrial population become much more conversant with science than they now are. Sir H. T. DE LA BECHE has also endeavoured to impress on his hearers the fact that the more real knowledge is diffused, the more will effective practice be increased; science and practice are not antagonistic, but mutual aids—one advances the other; civilisation advances science, viewed in all its strictness, and science by its application advances civilisation. In the establishment of this school of miners and working men's lectures there is evidently an earnest desire, as far as power and ability will permit, to promote the progress of those to whom this teaching has special reference, supplying a national want, and thus advancing the general good of the country.

To all those who feel a desire for the advancement of the mechanic and artisan of this country in scientific knowledge, it will be gratifying to be informed that the efforts made for their instruction have been well appreciated; the whole of the tickets for the above lectures, necessarily limited, as the theatre will only hold 450, having been appropriated, numerous applicants still being unsatisfied, and others continually appearing. Under these circumstances, the council have decided on repeating the course after Easter, of which due notice will be given, and thus, as far as circumstances within their control will allow, rendering their efforts of the greatest public utility. The registration fee to the entire course is but sixpence, but applicants will have to show that they really are artisans.

For a considerable period public attention has been directed to the various enterprises which have been projected for developing the auriferous deposits which undoubtedly exist in the two modern "El Dorados," California and Australia; and though we would by no means depreciate the importance of these gigantic discoveries, nor undervalue the magnitude of the projects which are put forward by the promoters of the several companies, yet we would gently remind the mining community, that while they seek wealth across the ocean they should not neglect the acquirement of it at home, inasmuch as the acquirement of it there is used for the purpose of promoting and encouraging British industry, instead of enriching the coffers of aliens. The staple mineral productions of Great Britain are coal, iron, and copper; from these she has derived a great accession of wealth, and that pre-eminence which she possesses in her manufacturing and mechanical powers.

One of the first companies ever instituted for the prosecution of these sinews of our wealth was the "Governor and Company of Copper Miners in England," originally incorporated in the year 1691. After a variety of fluctuations, in the year 1847, owing to the pressure of the crisis, it was forced to mortgage its property to the Bank. In the year 1848 it suspended payment; in the last Session of Parliament an Act was obtained which authorised the company to effect an arrangement with its former creditors and stockholders, by which means the existing capital was reduced from 1,250,000l. to somewhat less than 300,000l.; a power was given to raise a new capital of 200,000l., in 8000 preference shares, of 25l. each; and a further sum of 100,000l., in like shares, if deemed expedient; these preference shares being entitled to precedence over the present capital.

The property extends over 4000 acres of land. The copper-works, to which a rolling-mill is attached, are capable of producing upwards of 2500 tons of refined copper per annum. The iron-works turn out about 30,000 tons per annum of finished railway bars and other iron, in addition to that raised for the making of tin plates. The tin plate-works, which are carried on by water-power, make about 75,000 boxes of tin plates yearly. To these are attached chemical works, for the production of the materials employed in the manufacture. On the property there are about 1000 houses and cottages, tradesmen's shops, public houses, and a public market, which return a net annual rental of from 4000l. to 5000l. The collieries abundantly possess the well-known and valuable mineral "black-band." The works possess good roads, water-power, and easy and expeditious



transport to and from the port by means of railroad. Our limits will not allow us to enter here into a more detailed description of the property. An outlay of about 700,000*l.* has taken place, in order to bring the works to their present state of perfection, and those subscribing new capital will become proprietors at a nominal value. It must be borne in mind that one of the great features in this company is that it is one incorporated by Royal Charter, and, consequently, the shareholders incur no liabilities for the debts of the company; and, assuming the worst, they can only be responsible for the amount of their subscription—the Joint-Stock Companies' Act in no way dealing with the constitution of this ancient body.

A certain amount of money is required to redeem the property and to form a working capital. No outlay is required for buildings, works, or machinery—all is in the most perfect order; and if in the absolute possession of the Governor and Court of Assistants, would be immediately making returns. It is free from the disadvantage of being situated in a distant and foreign locality; and if any doubts arise as to the prosecution of the investment, the question can be personally solved in 24 hours. An organic change has taken place in the governing body of the company. Experience has shown them the errors which their predecessors have committed, and the means to avoid them; and we cannot doubt but that they will avail themselves of the knowledge so acquired.

The property, if economically and energetically prosecuted, cannot fail to be one of the most successful in the United Kingdom, possessing as it does all the capabilities of nature and science to render it such; and as an investment, we would recommend many of those who desire to embark their little capital in foreign lands to pause, and see if they cannot find as eligible means of speculation at home, where they may not only reap a good interest for their money, but likewise feel the satisfaction that, while protecting and fostering native industry, they are a part and parcel of those who give employment to thousands of their fellow-countrymen, as the Governor and Company of Copper Miners have done "time out of mind."

On reference to the Journal of the 27th Dec., 1851, a notice will be found, with diagram and plan of the proposed City and Clerkenwell improvements, and the extension of all the London railway termini into one central spot. Mr. Pearson, the City solicitor, who has so prominently brought forward the subject, a few weeks since visited, with a large number of gentlemen connected with the corporation, the working model of Messrs. CUNNINGHAM and CARTER's new mode of propulsion on railways, and all felt so satisfied of its practicability on a proper working scale, that it was determined to take the professional opinion of an experienced engineer, in the shape of a report, upon every item of construction and working details. JOHN CHAPMAN, Esq., C. E., of the East Indian Railway, was chosen for this purpose, who has carefully entered into the merits of the system, and furnished a thoroughly impartial and elaborate statement on what he considers would be the capabilities of such a railway on a full working scale. After showing the several essential portions of which the invention consists, it is assumed, that if the distance between the successive pairs of air-engines were not greater than the length of the shortest train, the question is reduced to that of the cost of power generated in stationary steam-engines, and applied to the trains by means of the air-engines, as compared with that of locomotives. Upon this assumption, 30 pairs of air-engines per mile would be required, and supposing the power necessary to be equal to 12 horses per mile for 24 hours, or 24-horse power per mile, if worked during intervals, amounting to 12 hours per day, equal to a 240-horse power engine, at every 10 miles, the interest of extra capital, in addition to every working expense, fuel, engineers, stokers, drivers, &c., amounts to 8*8* pence per train per mile—the generally admitted average of the locomotive being 10*0* pence per mile. But working on the principle proposed by the patentees, when a train is not of sufficient length to be within the grip of two pairs of air-engines at once, but must rely on the momentum it receives from one pair to carry it on to the propelling action of the next, Mr. CHAPMAN now takes out every alternate pair of engines, and after a careful calculation of the loss of velocity sustained while a train is not in *grip*, and every disadvantage—more, in fact, than he thinks would accrue in practice—the estimated cost of 40 trains per day is reduced to 43 pence per train per mile, to which add 0*78* pence interest of extra capital, gives 5*08* pence per train per mile, or about one-half of locomotive cost. In these calculations Mr. CHAPMAN takes the formula of Mr. ROBERT STEPHENSON, that a locomotive engine expends as much power in moving itself as would propel 15 ordinary loaded carriages, and Mr. WYNDHAM HARDING's rule for the resistance of railway carriages on a level; and clearly shows that in populous neighbourhoods the locomotive cannot profitably work those small and frequent trains, which tend so much to public convenience, but in this system of propulsion the duty of working such trains would be equalised; and in thinly populated districts, where a line must be cheaply worked, or not at all, railways on this principle might be profitably established, where the expense of the locomotive engine would prevent its introduction. Having satisfactorily combated any objections which have been, or might be made, such as the suddenly putting the air-engines from a state of rest into rapid action, and shown that in the mechanical arrangements of the system nothing impracticable exists, but all the disadvantages of the atmospheric system with the longitudinal valve are avoided, Mr. CHAPMAN concludes by stating that his original impressions were adverse to the plan, but have been entirely changed by his inquiries made upon data supplied by authorities of the highest character, though advocates of a different system before the invention was in existence. He can see nothing in the nature of the means employed likely to neutralise the great advantages which he believes to be inherent in the system, and considers the conclusions he has come to likely rather to fall short of than exceed the success which, under actual experience, the system is likely to achieve; sees no difficulty in the character and details of the machinery, and believes that its introduction would greatly increase public convenience, economise railway transit, and produce highly satisfactory profits to those who may promote its use. For such a centralisation of railways as Mr. PEARSON's scheme suggests, locomotives, vomiting fire, smoke, and steam through the streets, would be perfectly inadmissible; while CUNNINGHAM and CARTER's system is beautifully adapted to such arrangement; and we have no doubt, if once brought into action, and its advantages in safety, speed, certainty, and economy, once recognised, it would gradually be adopted by every railway company in the kingdom.

**IMPROVED BOILER FOR MARINE ENGINES.**—At the Institution of Mechanical Engineers, Mr. Andrew Lamb (of Southampton) described a new boiler, the peculiarity of which is that narrow flues are substituted for the ordinary tubes—the advantages being that, while it possesses an equal amount of heating surface in the same space as tubular boilers, it is free from the evil of chocking with inside deposits of soot and ashes, because the flues being in one sheet for their whole depth, the deposit falls into the bottom of the flues, and from the great draft is swept through into the uptake, and hence into the chimney.

Messrs. Murdoch and Aitken, of Glasgow, have adopted a new invention for the consumption of smoke, which is valuable as being applicable to boilers in use by the simple addition of a piece to the front, containing a new furnace. A chamber between the back of the new furnace and the front of the old boiler gives admission to a certain quantity of atmospheric air, by which means the smoke is so effectually consumed that even with hard firing, it is scarcely perceptible at the top of the chimney-stalk. The estimated cost of the improvement is between 25*l.* and 30*l.*, but even this expenditure, trifling as it is in comparison with the good to be achieved, is met by increased steam-power. In the boiler at Messrs. Murdoch and Aitken's works about two-horse power extra has been obtained—an important advantage, and one which will go far to remove the stumbling-block of expense from the way of parties who have as yet manifested considerable coolness in aid of the movement being made to obtain the benefit of a purer and healthier atmosphere.

**DAMAGE FROM THE SMOKE OF PATENT FUEL WORKS.**—A case was recently tried in the Swansea County Court, before Thomas Falconer, Esq., the newly-appointed judge, in which Margaret Hughes, and Thomas Owen and wife sought to recover damages against the Patent Fuel Company, for injury done to their fruit trees and vegetables by the smoke from defendants' works. The damage was distinctly proved, but the defence was that it was a nuisance, it was a public one, and, therefore, punishable only by indictment. After some remarks from the judge, who called attention to the beneficial effects of County Courts, and hoped the jury would assist him to preserve their authority unimpaired, a verdict was given for the plaintiffs—damages 4*0s.*

Large quantities of manganese ore have been found near Vizagapatam and Mirzapore.

### THE WINDING-UP ACT—IMPORTANT POINT.

The Northern Coal Company's affairs were brought before Master Tinney on Saturday, when a question was raised in connection with the Scotch law of sequestration, and the case of Mr. Gilbert Laurie Findlay. The facts were as follows:—It appeared that Mr. Findlay had been a trader in Edinburgh, and had become a holder of 50 shares in the Northern Coal Mining Company, but became bankrupt in December, 1847, and died in May, 1850. When the case first came before the Master, he decided, after a protracted discussion, on placing Mr. Findlay on the list of contributors, in respect of the 50 shares; but after a lapse of some time, his solicitor appeared, and satisfactorily proved to his Honour that Mr. Findlay had been a bankrupt at the time stated, whereupon his name was struck off, and that of his trustee, Mr. James Brown, a solicitor, and also of Edinburgh, was substituted, and held to be liable to the payment of the calls and arrears of calls on the 50 shares in question, but to the extent of assets only, in accordance with the decision of the late Lords Commissioners in Chancery. In this state matters stood for a considerable time. Mr. Brown paying no attention to the proceedings going on in the Master's office in connection with himself, and of which he had had due notice. However, on Saturday last, his solicitor appeared for him, and contended that Mr. Brown's name should be struck off the list upon the following grounds:—He stated that Mr. Brown had administered to the bankrupt's estate, and disposed of the whole of the assets; he then took the steps required by the Scotch law of sequestration in such cases—namely, he sent in his petition to the sheriff, in which he set forth the fact of his having administered the whole of the bankrupt's estate and effects, and prayed for the usual certificate of deliverance from all further liability. These documents he had received, and now produced them to the Master's satisfaction. The solicitor further satisfied his Honour that in no such case was a "certificate of deliverance" ever granted in Scotland until the Sheriff had had proof not only that all available assets had been realised, but of all assets likely to come to the hands of the trustee. The solicitor then called the Master's attention to the 24 and 24*1*/<sub>2</sub> V.C. cap. 31, an Act which provided that all such proceedings of sequestration in Scotland should be recognised and held good in all questions of law, such as the present, arising in any of the courts in England. The Master said he was satisfied that the case in favour of Mr. Brown's application had been made out, and he would, therefore, make an order that no further proceedings in this matter should be taken against Mr. Brown until further orders from him.

### CAMERON'S COALBROOK COMPANY—WINDING-UP.

Mr. Bagley appeared as counsel for Major Stone before his Honour Master Richards, on Saturday, for the purpose of substantiating a claim and proving a debt for 3000*l.*, which had arisen in the following manner:—The claimant, Major Stone, in February, 1846, lent the company 3000*l.*, and he received, in the following April, a bill of exchange for the amount, payable at six months, but it had never been discharged since.

Mr. W. Galsworthy appeared on behalf of the official manager, but he had not yet been able to have the books ready, or a list of alleged contributors made out.

Mr. Hancock contended that the Master could not make any order, or take any step whatever in respect of this debt, until the list of alleged contributors be laid before him, and he referred his Honour to the section of the Act upon which he relied as his authority for his statement.

Mr. Lewis, for the seceding shareholders, stated that this bill of exchange had already been made over to Mr. Barton, who had commenced an action for the recovery of the amount; and until that action should be decided, the Master could not take the step now asked for, because if he did there would then be two claimants for the same sum. He considered this a sufficient ground for adjourning the question. Besides, there were a great many persons who had been shareholders in this company, but who had gone out of it in 1849, and who had paid up all claims against them up to that time, and it would be too bad if they should be now called upon to pay any portion of this sum.—Mr. Bagley said he had no objection to an adjournment, provided this was admitted as a claim.

The Master observed that the action at law would be decided long before any proceeding before him in the matter could be brought to a close. He could not see what objection there could be to allow it as a claim.—Mr. Bagley said it was very possible that the order for the winding-up of this company would be discharged within a very short period.—The Master, after some further discussion, decided upon admitting the bill as a claim.—A solicitor asked the Master what was to be done with regard to the manager of the concern at Swansea, who also had a claim for his services, but who at the present moment was unable to work; and then there were the workmen, who he believed were almost starving; yet it was absolutely necessary that some person should be employed to take care of the property and works. Then there was a claim for a large arrears of rent.—The Master asked why the landlord did not make a claim.—The solicitor said that the mortgagee had given notice not only to the landlord, but to every one of the shareholders. There was some moveable property on the premises, but if any attempt was made to sell any of it, the landlord could immediately come in. The engine and other property were worth about 1500*l.*, but it would cost about 4*l.* per week to keep the water out of the mine, and 4*l.* for a rope. Perhaps it would be as well to make the attempt to sell some of the moveable property.—Mr. Foxburgh observed that, if the official manager had settled only five or six names on the list, the Master could make a call upon them. In fact, he had the power to select one or more of the most wealthy of the shareholders, and make them pay; and Lord Cranworth had said that the Master had the power to make a call upon any *single* one of the contributors for the whole of the money required by the official manager.

A solicitor, on behalf of Mr. Atkinson, appeared before Master Richards yesterday, and stated that he now produced the affidavits of his client, in which were set forth the whole amount of the debt due to him, and the particulars in full. Altogether he claimed 332*1*/<sub>2</sub> *ss.* 1*1d.*; but though this large sum was due for his services as manager of the works, he had been unable to get any money, and he was now actually living upon nothing.—Mr. Hancock said that for some time past the manager had had nothing to manage. In answer to the Master, he said he had several objections to make to the items composing this debt, and that these would be found to be *bona fide* objections.—Mr. Atkinson's solicitor said his client was placed in this position—that though he was the manager of the concern, he was receiving no salary, yet he was obliged to remain on the spot.—The Master said that, as the official manager was not yet in a position to come before him, he could not otherwise deal with this demand than as a claim, subject to any objections which might hereafter be made to it.—Mr. Hancock said he had no objection to it being admitted as a claim.—Mr. W. Galsworthy said that Mr. Williams had also some claims against the company for costs; but he was at present out of town, so that nothing could be done with them until his return.—Mr. Hancock, in answer to a question from the Master, said that he believed some negotiation was going forward for a sale of some of the moveable property, which Mr. Cameron was willing to permit, if his debt should be allowed as a claim.—Mr. W. Galsworthy then handed in the report of the official manager on the result of his visit to the mine, and the Master took it, and said he would read it over.—The parties then withdrew.

### GERMAN MINING COMPANY—WINDING-UP.

The official manager (Mr. Norris) appeared before Master Tinney, yesterday, for the purpose of having Mr. Stone's name removed from the list as personally liable in respect of four shares, and put on as creditor's assignee.—Mr. Wood appeared on behalf of Mr. Stone, and stated that that gentleman had appealed against his Honour's decision, which was given in April, 1850; and Sir Knight Bruce, after hearing the whole of the evidence elicited before the Master, decided that Mr. Stone was not liable, and sent the case back to his Honour to review.—Mr. Norris said, his Honour would now have to put Mr. Stone on as creditor's assignee, and the official assignee, Mr. W. Pennell, as well.—In answer to a question from the Master, he said that no offer had yet been made for the mine; but he had succeeded in reducing the expenses of the working of the concern by about 120*l.* a year.—Mr. Wood said, he did not consent to Mr. Pennell being put on, but would not oppose it.—Mr. Pennell's name was then put on, of which he is to have notice.

**ENCUMBERED ESTATES, IRELAND.**—There can be now but little doubt that the bill for regulating the sale of encumbered estates in Ireland, and which secures a *bona fide* title to the purchaser, is calculated to advance the prosperity of that country, secure employment to the peasantry, and raise them to their proper position in the social scale. Although among the many purchasers of estates under this Act, only one or two have yet become residents, the proof which these few are able to give of the perfect security which exists for both life and property, and of the remunerative character of the soil for the outlay, will induce others to follow the example, and go far towards the perfect regeneration of the population. One instance in particular is mentioned of an estate beautifully situated, but in a wretched state of farming, bought at ten years' purchase. The first step was to get the small tenants off the land by forgiving their arrears of rent, paying their rates and taxes, and purchasing their stock at valuation, thus obtaining the land without trouble, and receiving the blessings of the poor creatures, many of whom were thus enabled to emigrate to America. This estate is now in a most thriving condition—provisions and even luxuries are exceedingly cheap; and this resident proprietor lives in a cottage without lock or bolt, and sleeps on the ground-floor, without shutters to the windows. We have now before us the particulars of some most eligible property, situate in the county of Cork, to be sold in the city of Cork on the 20th inst., being the fee simple estate of R. H. H. Beecher, Esq. This property will be sold in 12 lots—the first consisting of the fee of the mines of copper, lead, and other minerals, in the lands of Clohane, Quorisk, Mount Gabriel, Letter, and Knocknaclovane, situate at Mizen Head, extending over 1856 acres—the royalties being 1*1*/<sub>2</sub>th on the two former, and 1*1*/<sub>2</sub>th on the three latter, not far from Ballydoeb, and in the neighbourhood of the Berhaven and Allihies Mines; they are leased to a company for 31 years, six of which have expired. Lot 2 consists of the townland of Derrynatra; also mineral land, consisting of 497 acres, near Skull, the southern portion bounded by Long Island Channel; and it is believed the Coshken lodes run through the property. Lots 3, 4, 8, 9, 10, and 12 comprise Holybrook House and demesne, the residence of the owner (Mr. Beecher), 196 acres, 703 acres of land near Ballydoeb, 211 acres adjoining the Holybrook lands, and 690 acres near Skibberen, among which are some valuable turbaries and covers for game. Lots 5 and 6 consist of 150 acres, adjoining Crookhaven Harbour, so admirably situated for a trans-Atlantic packet station. It holds out great inducements for building marine villas, and rich copper ore has been discovered on this portion of the property. Lot 7 consists of 522 acres of land at Coolbary, valued at 142*l.* per annum, of which 46 acres are turf, valued at 1800*l.*; and lot 11 comprises Carbery, Furze, and Horse Islands, in Dunmanus Bay, containing 42 acres, valuable as salt marshes, for feeding horses and black cattle. The whole property extends over 3014 acres 1 rood 32 poles, liable to a rent charge of 110*l.* 3*s.* 1*d.*, and valued, exclusive of turbarry and plantation, at 1299*l.* 19*s.* per annum. The district in which the principal portion of this property is situate is remarkable for its fine harbours, abundance in mineral wealth, its coasts presenting extensive and valuable fishing grounds, abundant water-power for manufacturing purposes, and inexhaustible supplies of sea-weed and sand, so valuable as manure; and Mr. White, in his descriptive particulars, shows that in such a field of industrial enterprise, in a climate remarkable for its extreme mildness and salubrity, a person of energy, with but moderate capital, might here soon realise a handsome independence.

### ON THE MINERAL FEATURES OF CERTAIN DISTRICTS OF CONNEMARA, COUNTY GALWAY.—No. III.

BY PIERRE J. FOLEY, M.E.

The limestone stratum of Connemara contains a great number of metallic deposits, the most numerous being rake veins, or vertical fractures. These veins, for the most part, run parallel to each other, having pipe-veins crossing them at right angles. The geological formation is almost everywhere impregnated with sulphurets, which in some districts arrange themselves in immense metallic veins, holding rich deposits of lead ore. There are courses and lodes to be noticed which have a relation to the larger deposits. The geological formation from Galway to Clifden is mountain limestone, consisting principally of carbonate of lime, encrinural limestone, granwacke slate, and syenite, with masses of greenstone and hornblende; the prevailing ore of this formation is galena of a rich description, averaging from 60 to 78 per cent. The veins are generally inclining to the perpendicular, sometimes longitudinal, swelling from a small beginning to a large mass, increasing and decreasing in depth and distance.

The pipe veins, which cross the rake veins at right angles, are filled with sulphuret of zinc, of a reddish brown colour, crystallised in a variety of forms, sulphuret of barytes, or cawk, in beautiful crystals, fluor-spar of a green, red, and purple colour, beautifully aggregated together, and limestone spar, in large crystals. As the veins run at right angles to each other, they often meet, and cause a displacement, called "heaves." In the Glengola Lead Mine the veins are interstratified with hornblende, which breaks the regularity of the series; it is when the ore comes in contact with these dykes that the metal is to appearance for ever out off, but by sinking or driving through these interruptions the lost ore will be found again in large bunches of solid metal. The dykes, for the most part, are enclosed in the run of the country rock, which I consider causes the large quantities of galena now raising from this most promising mine. The lodes are exceedingly rich in ore of a crystallised cubical form; in fact, by looking at the lodes of this district (taking in Rusheeny and Clareville), the geological features in which the metal is growing, the regular uniformity of the strata, now explored to a depth of 22 or 23 fms., and in an easterly direction by drivings at bottom, and the some hundreds of tons of galena raised and dressed from these metalliferous channels, the practical miner may safely go on with the necessary explorations, and at the end secure to his employers a profitable return.

I have not the least hesitation in saying that the limestone of Connemara has been deposited by water, stratum, super stratum, and was once the bed of the vasty deep. We need only look at fossils of encrinural limestone, the water-worn fissures of the formation, and the fossilised oyster beds of Clareville; the conclusion is obvious—that this part of Galway was formed by the waters of what, perhaps, was once called Connemara Bay. There are other mineral districts in this range, which shall claim attention in my next communication.—Oughterard, Jan. 21.

### IMPROVEMENTS IN COMPRESSING, DRYING, AND COKING PEAT.

The peat bogs of England and Ireland are at the present day attracting such general interest, that any improvement in the preparations of peat, or scientific suggestions relative thereto, must be considered valuable, as tending to its beneficial development. In this spirit, our esteemed correspondent, Mr. Henry Dircks, of Moorgate-street, has forwarded us a description of a peculiar pressing-machine, and drying or coking furnaces, which may suggest improvements and modifications, and which not being patented are open to the public, and to any alteration that may suggest itself on practical application.

In the preparation of peat two processes are followed—1. That which secures all the chemical products—and, 2. That which dispenses with them, and obtains only peat charcoal, or otherwise simply compressed peat.

It is to this latter process that the invention principally applies, though in part it will answer for the first, particularly so far as relates only to the pressing and drying. A continuous and cheap process is the great desideratum. If cost were less an object, machinery of a most effectual character could readily be devised, but the difficulty is to obtain speed and power to compress tons of an article like peat, tenacious of moisture, stubborn to press, and difficult to dry artificially in quantity in a short space of time. The present plan provides that the labourer shall throw his peat from a barrow into a hopper, and that by the aid of a small steam-engine it shall be compressed by a peculiar arrangement of rollers, hereafter described, and be conveyed thence by stout canvas bands to another hopper leading to a drying oven, where, meeting with a series of endless chain-work, the compressed peat is taken through one, two, or more inclined hot-air flues, and so delivered dry; or by a continuation of the same arrangement of furnace, but one heated accordingly; the dry cokes dropping into this second or coking furnace is scraped or drawn along one, two, or more inclined flues, of a temperature sufficient to charn it thoroughly.

From this description, it is evident that the process may be stopped at the mere pressing, to be afterwards dried in the open air, particularly during the summer season; or it may be stayed at the drying, or baking, in the first furnace; or it may be finally coked. Again, the first and second process will apply where retorts are used, and the chemical products are required to be retained.

The press is one of peculiar construction, consisting of one central large roller, A, from 1 foot 6 inches to 2 feet or more in diameter, and perhaps 2 ft. to 3 ft. long. Around this are placed six lesser rollers, B, B (any) 4 to 6 inch in diameter—the first 6 in. apart from the main roller, the next 5 in., and so on, until the sixth roller leaves only a space of 1 in., or thereabouts, between it and the large roller. Two endless bands of the very strongest canvas or sacking, C, D, are stretched on these rollers. At the point where the space is widest between the rollers a large hopper, E, is fixed, within which are two wooden rollers, furnished with iron spikes, to tear and mash the peat; while at the top it is stamped mechanically or by hand, to drive it in between the first roller, B, where, when it once gets a hold, the revolving of the bands will carry it forward. It is expected that in this way the peat may be compressed to one-sixth its bulk, or to any other gauge, by the rotary action of this press, in which the canvas bands serve only as guides to retain and carry forward the peat, and to drain off into a trough, F, below any moisture that will flow under such compression. The engine power is applied only to the great centre roller, the small ones revolving simultaneously with it by the action of the bands and the peat, delivering the later at G, G. The two canvas bands are kept taught by the wooden rollers, a, a, a. At the delivery end, G, suitable cutters may be placed, to divide the peat into regular shaped pieces.

The drying and the coking furnaces differ only in temperature, both being heated with peat, consumed in proper fire-places at bottom. They are built with their flues one over the other, so as to appear zig-zag in section. Within these are endless chains, worked over pulleys; and so arranged that the bars between them scrape the entire lower surface of two flues; therefore a furnace of four flues requires two such mechanical arrangements of scrapers. They are in form like a ladder—the two ends joined, the sides jointed, and the steps forming the scrapers, which, travelling through the hot flue, keep the peat in constant motion, and constant change of place and temperature. And it is believed that it might, travelling at a moderate rate, turn out several tons per day, quite dry; or this might be facilitated by blowing air through the flues, at such a rate as should not materially cool them.

From the above description, we have no doubt our mechanical readers will very easily comprehend the principles of the machine and the ovens. It appears to us to be well adapted for the purpose, and for economicality. Preparing the peat for various chemical processes, as well as producing a cheap and valuable coke; and as the arrangements can be made subject to numerous modifications, we shall be happy if the suggestion is productive of beneficial effects.

**THE IRON TRADE IN FRANCE.**—Recent letters announce a remarkable amelioration in the position of the metal foundries in the department of the Loire. All the ironmasters are in full work, and fires which were extinguished for some years are again lighted. The orders already received from the new Lyons and Avignon Railroad Company afford promise of a most prosperous season.



## Patents.

## PATENTS GRANTED DURING THE PAST WEEK.

J. M. Ritter, 25, Surrey-street, Strand, for certain improvements in the locks of arms and cannons, and in gun matches, or in the mode of igniting gunpowder used in guns, and in machinery for manufacturing the same.  
W. Smith, Kettering, Northampton, for improvements in apparatus for cutting or breaking lump sugar, and other vegetable substances.  
A. V. Newton, Chancery-lane, for improvements in the manufacture of pigments or paints; also for improvements in machinery for weaving coach lace, Brussels tapestry, and velvet carpeting, and other piled fabrics.  
E. Highton, Clarence-villa, Regent's-park, for improvements in electric telegraphs.  
W. Longmaid, Beaumont-square, for improvements in obtaining gold.  
O. Williams, Stratford, Essex, for improvements in preparing compositions to be used in railway and other structures, in substitution of iron, wood, and stone.  
C. Cowper, Southampton building, Chancery-lane, for improvements in multiplying motion applicable to steam engines, saw-mills, and other machinery in which an increase of velocity is required.  
M. J. Roberts, Esq., Woodbank, Gerrard's-cross, Bucks, for improvements in agricultural instruments.  
A. Bedard, 25, Rue Tait Bout, Paris, France, for improvements in propelling and navigating ships, boats, and vessels, by steam and other motive power.  
J. H. Reed, late of the 17th Lancers, Harrow-road, improvements in propelling vessels.  
K. A. Brooman, of the firm of J. C. Robertson and Company, Fleet-street, for improvements in the purification and decoloration of oils, and in the apparatus employed therein.  
W. Squire, High-Holborn, late of George-street, Euston-square, for improvements in the construction of pianofortes.  
F. P. Thompson, Waterworks-chambers, Orange-street, Trafalgar-square, for improvements in filtering and preserving water.  
G. Spencer, Lacey-terrace, Brighton, for improvements in the springs of railway carriages, trucks, and waggons.  
S. C. Lister, and J. Ambler, both of Manningham, Bradford, York, for improvements in preparing and combining wool and other fibrous materials.  
E. C. T. Crouelle, Rheims, for certain improvements in machinery or apparatus for preparing woollen threads and other filaments.  
R. Hesketh, Wimpole-street, St. Marylebone, for improvements in apparatus for restoring light in rooms, and other parts of buildings and places.  
P. Clausen, Gresham-street, for improvements in the manufacture of saline and metallic compounds.  
G. Torr, of the Chemical-works, Frimley-lane, Rotherhithe, for improvements in re-burning animal charcoal.

## DESIGNS FOR ARTICLES OF UTILITY REGISTERED.

T. Fotherby and Son, Leeds, setting up brush.—J. Shaw, Southover Laves, dried fruit dressing machine.—H. Hall, Spalding, pump and fire engine.—T. H. Ryland, Birmingham, joint for parrot handle.—H. Field and Son, Glasgow, domestic gas apparatus.—A. Hewitt, Burlington Arcade, calenderum (wig).—T. Woolley, Nottingham, parts of the action of a piano-forte.—T. Bedington, Birmingham, hat and coat guard.—J. Jacquier, Wood-street, Spitalfields, Jacquard machine.—Wolf and Baker, Sambrook-court, revolving fusse-box.—W. Jefford and S. Turner, New Radford, Nottingham, improvements in twist lace brass-bobbins.—S. F. Cottam, Manchester, bearings for spindles of spinning, doubling, and winding machines.—T. Smith and Sons, Birmingham, wick-holder and elevator for kerosene lamps.—J. H. Fiedler, Adde-street, travellers' expanding bag.—M. Hyman and Co., Long-lane, Exhibition cigar.—J. Warner and Sons, Jewin-croft, high-pressure valve.

## PROVISIONAL REGISTRATION.

G. Meicafie, Alkali-kiln, near Spalding, steam-wheel.—R. Jacobs, Cockspur-street, lamp and candle shade.—G. F. Phillips, Nassau-street, diastrometer, for measuring heights, angles, and widths of objects.—F. H. Edwin, Lincoln's-inn, lath sails.—*Mechanics' Mag.*

## DEVON AND CORNWALL MINERS' GOLD COMPANY.

FOR MINING IN AUSTRALIA.  
OFFICES.—No. 38, MOORGATE-STREET, LONDON.  
Notice is hereby given, that a MEETING of the COMMITTEE of ALLOTMENT will take place on Monday, the 9th of February, and that immediately after that day the allotment letters will be issued.  
By order of the board,  
GEORGE BUDGE, Secretary.

## DEVON AND CORNWALL MINERS' GOLD COMPANY.

FOR MINING IN AUSTRALIA.  
The Directors have the pleasure of announcing that NEGOTIATIONS are now proceeding for the APPOINTMENT of W. G. GARD, Esq., of the Devon Great Consolidated Mining Company, as RESIDENT DIRECTOR of this Company; and if completed, Mr. Gard will be dispatched by the Australian Mail Packet, advertised for April.  
38, Moorgate-street. By order of the board, GEO. BUDGE, Secretary.

## AUSTRALIAN FREEHOLD GOLD MINE.—The Com-

mittee of Management of this mine are about to ENGAGE TWO competent PERSONS to TAKE CHARGE of the MINING OPERATIONS on their ESTATE at LAKE BATHURST and at MELBOURNE.—Written proposals from any Gentleman having a thorough knowledge of gold quartz mining will be received at the Offices of the Company, if accompanied with testimonials and references. No personal application can be attended to.  
By order of the Committee of Management,  
WM. PUTSFORD, Secretary.

Temporary Offices, 10, Old Jewry Chambers, Feb. 3, 1852.

## ENGLISH AND AUSTRALIAN COPPER COMPANY.

Capital £300,000, with powers to increase to £450,000.  
Notice is hereby given, that APPLICATION has been made to Her Majesty's Most Honourable Privy Council, praying for the INCORPORATION of the above COMPANY by ROYAL CHARTER, for the purpose of smelting, extracting, reducing or refining, purchasing, selling, and otherwise dealing in ores, minerals, and metals, with powers to purchase and hold landed estates in Great Britain or Ireland, or in South Australia, or any other colony, and to let the same on lease, or to sell portions thereof, as may be deemed expedient; and that the said application has been referred by Her Majesty to the Committee of Privy Council for Trade and Plantations.  
ANDREW STOREY,  
17, Featherstone buildings, Holborn, London, for C. S. Gilman, Norwich.  
17, Gracechurch-street, Feb. 4, 1852.

## PORT PHILIP AND COLONIAL GOLD MINING COMPANY.

Capital £150,000, with powers to increase to £300,000.  
Notice is hereby given, that APPLICATION has been made to Her Majesty's Most Honourable Privy Council, praying for the INCORPORATION of the above COMPANY by ROYAL CHARTER, for the purpose of smelting, extracting, reducing or refining, purchasing, selling, and otherwise dealing in ores, minerals, and metals, with powers to purchase and hold landed estates in Great Britain or Ireland, or in South Australia, or any other colony, and to let the same on lease, or to sell portions thereof, as may be deemed expedient; and that the said application has been referred by Her Majesty to the Committee of Privy Council for Trade and Plantations.  
ANDREW STOREY,  
17, Featherstone buildings, Holborn, London, for C. S. Gilman, Norwich.  
17, Gracechurch-street, Feb. 4, 1852.

## THE MELBOURNE GOLD AND GENERAL MINING ASSOCIATION.—ON THE COST-BOOK PRINCIPLE.

A Company is in the course of formation, having for its object to explore and work the gold deposits in the south-eastern district of Australia. The prospectus, with an influential direction, will be published forthwith.  
W. F. ELLABY, Secretary pro tem., Walbrook.

## VICTORIA GOLD MINING COMPANY, PORT PHILIP.

AUSTRALIA.—The ALLOTMENT of SHARES in this COMPANY will take place on TUESDAY NEXT, the 10th inst.  
J. H. HATT, Secretary.  
9, Austin-friars, February 7, 1852.

## ROCKY-BAR MINING COMPANY, CALIFORNIA.

Capital 10,000 shares, of \$100 each, or \$1,000,000.  
BOARD OF DIRECTORS for 1851.  
PHILO D. MICKLES, President, New York.  
GEORGE S. FITCH, Treasurer, New York.  
EDWARD C. DELAVAN, New York.  
Hon. JOHN YOUNG, late Governor of the State of New York, and now Assistant Treasurer at New York, New York.  
HARVEY EVERETT, Orange County, New York.  
Hon. R. H. WILLIAMS, Yates County, New York.  
OREN COLTON, Philadelphia.  
JAMES STANTON, California.  
JAMES DELAVAN, California.  
SAMUEL B. WOOLWORTH, Jun., Secretary.  
OFFICE.—20, MERCHANTS' EXCHANGE, HANOVER-STREET, NEW YORK.

This is the only completely organised Company in the Atlantic States for Quartz Mining in California. It possesses two of the largest and most valuable locations in that State—one situated at Rocky-Bar, on the middle fork of the American River, about 70 miles from Sacramento City, and the other at Massachusetts-hill, Grass Valley, Nevada County.

Machinery of the most powerful and efficient kind was shipped from New York on the 10th March, 1851, arriving on the Company's property in the following September. According to the report received by the Executive in New York, this machinery was expected to be in full operation on the 1st January of the present year.

With a view to permanently introducing this undertaking in England, arrangements have been concluded by which 1000 shares, or one-tenth of the Company, will be offered to English capitalists.

Prospectuses, containing a full statement of the position of the Company, with forms of application, can be obtained of Mr. George E. Seymour, 38, Throgmorton-street (on and after Monday, the 2d inst.), who is authorised to negotiate the sale of the shares, and to deliver the certificates therefor.

## GOLD MINES.—W. CROSSKILL, Ironworks, Beverley.

Yorkshire, has on show, and in motion when required to prove their capabilities, his PATENT MILLS to GRIND MINERAL ORES. Two mills will grind two tons of gold ore per hour to powder with eight horses. W. C. will also furnish steam-engines, with very simple boilers, to raise steam by either wood or coal, mounted to work on carriages, so that no carriage has to carry more than 20 cwt. W. C. will engage to furnish the whole, with duplicate grinding parts warranted to grind 50,000 tons of ore, for the sum of £1000. The wearing parts can be replaced for 2d. per ton of ore. The mills are so simple and strong that they cannot be broken. Duplicate wearing parts would fit either mill in case of accident, and can be had for £50 extra.

## TO GOLD DIGGERS &amp; MINERS.—WALKER'S PATENT

MINERAL STAMPING AND WASHING MACHINES, enabling every man to do his own work. Machines upon this principle may be worked by men, cattle, or steam, affording every facility for large or small companies to clean their ore at a small cost. Steam-engines from 4 to 40-horse power.—13, City-road.

## THE GOVERNOR AND COMPANY OF COPPER MINERS

IN ENGLAND.  
Incorporated by Royal Charter of 3d William and Mary (1691), confirmed by Statute 14th and 15th Victoria, c. 103.

GOVERNOR.—Sir JOHN DEAN PAUL, Bart., 215, Strand.  
DEPUTY-GOVERNORS.—JOHN HENRY PELL, Esq., Oak Hill, East Barnet.

COURT OF ASSISTANTS.  
ANDREW BONAR, Esq., Gloucester-street, Portman-square  
ALEXANDER BEATTIE, Esq., Old Broad-street  
ALFRED FOWLER, Esq., Dutch-lane, Bedford-square  
GEORGE GAY, Esq., Bedford-square  
WILLIAM GILBERTSON, Esq., Warrford-court  
ALFRED JANSON, Esq., Lloyd's  
JOHN PERCE KENNARD, Esq., Lombard-street  
P. F. ROBERTSON, Esq., Old Jewry  
WILLIAM AMBROSE SHAW, Esq., Wycombe Lodge, Kensington  
J. ASHTON YATES, Esq., Bryanston-square

BANKERS.—Messrs. Heywood, Kennards, and Co., 4, Lombard-street; Messrs. Strahan, Paul, Paul, and Bates, 217, Strand.  
SOLICITORS.—Messrs. Deaborough, Young, and Deaborough, 6, Sise-lane, London.

Messrs. Foster and Braithwaite, 68, Old Broad-street, London.

This company is about to be re-organised, under the authority of an Act obtained in the last Session of Parliament. A new capital of £200,000 is thereby authorised to be raised in 8000 shares of £25 each; and the Act declares that such shares shall, in all respects and for all purposes, be entitled to preference over the present capital of the company. To the holders of these shares a preferential interest, at the rate of 45 per cent. per annum, will be guaranteed, besides the right to participate in the general profits of the company equally with the proprietors of old stock, after the latter shall have received a dividend of 4 per cent. per annum.

As the holders of such shares, being members of a company incorporated by Royal Charter, will incur no personal liability whatever for the debts and engagements of the company, it is conceived that the present affords a peculiarly satisfactory and eligible mode of investment.

Prospectuses, containing full terms and particulars, and the form of application for shares, may be had on application at the offices at Messrs. Foster and Braithwaite, 68, Old Broad-street.—January 26, 1852.

TY MAWR SLATE QUARRIES, CARNARVON, NORTH WALES.—Capital £15,000, in 3000 shares, of £5 each.

UPON THE COST-BOOK PRINCIPLE.

The liability of the shareholders being limited to the amount of their individual subscription.

BANKERS.—WILLIAM LUCAS HANLEY, Esq., Highbury  
ALEX. MACLEAN, Esq., Harrow-on-the-Hill  
BANKERS.—The Commercial Bank of London, Lothbury.

This Company is established for enlarging and developing "the Ty Mawr Slate and Slab Quarries," which are situated in Nantlle Vale, Carnarvonshire, on one of the richest veins in North Wales, and capable of returning 600 tons of most valuable marketable slate per month. Attached to it is a free wharf at the adjacent port of Carnarvon, where vessels of 150 tons burden may lay alongside and load.

The net profits of the quarry average upwards of 40 per cent. per annum.

Reports, plans, and estimates, with specimens of the slate, may be inspected at the Company's office, No. 32, Moorgate-street, London, where also applications for shares in the accompanying form may be made.

JAS. BACON, Secretary.

FORM OF APPLICATION FOR SHARES.

TO THE DIRECTORS OF THE TY MAWR SLATE COMPANY.

GENTLEMEN,—Be pleased to allot me shares, or any less number, in the above Company, and I hereby undertake to pay the £5 per share as and when required by your letter of allotment.

Name in full .....

Profession, trade, or occupation .....

Residence in full .....

Place of business (if any) .....

Name and address of referee .....

Date .....

COLONIAL GOLD COMPANY.

—Provisionally Registered, according to the Act 7th and 8th Victoria, cap. 110.

Capital £500,000, in 100,000 shares, of £5 each.—Deposit £1.

MANAGERS.—Messrs. John Taylor and Sons.

BANKERS.—Messrs. Barnett, Hoare, and Co., and Messrs. Masterman, Peters, and Co.

SOLICITORS.—William Loaden, Esq., 28, Bedford-place.

BROKERS.—Messrs. Hill, Fawcett, and Hill, 29, Threadneedle-street.

TEMPORARY OFFICES.—6, QUEEN-STREET-PLACE, UPPER THAMES-STREET.

PRELIMINARY PROSPECTUS.

The managers of this company having been called upon by many influential friends to form an association for gold mining at Port Philip and in other parts of the Australian colonies, and having for some time past contemplated and planned the establishment of works in London for the reception and reduction of rich gold, have determined upon recommending that the two objects should be combined, and that a powerful company should be formed, and an ample capital subscribed for these purposes.

The objects of the company are—the working of mines and alluvial deposits of gold in the best parts of Australia in a systematic manner.

The erection of works in Australia, near the mines, where the ore produced by this company, as well as that raised by other companies, and by individual miners, may be concentrated for shipment to England.

And the establishment of works in London, in which the richer classes of gold ore, imported from Australia or any part of the world for reduction may be economically reduced.

It will be obvious that a large capital may be required, and may be very profitably employed in carrying out the objects above stated, but the amount for which provision is made can only be wanted, and will only be called for, in case the successful working of the concern renders and proves it to be necessary.

The sum raised by the first deposit—viz., £100,000—may probably prove ample; and no more than an additional sum of £100,000, in two instalments of 50s. each, will be called up, without the sanction of the shareholders.

The whole scheme has been laid before the Government, and application for a Charter of Incorporation has been made, which has been favourably entertained. The Charter will limit the liability of the shareholders, afford facilities for the importation of labour into Australia, aid the colonial, as well as the home Government, in the collection of the royalties, and give stability and duration to the company.

The well-authenticated statements of large discoveries of gold in different districts of Australia, and the very imperfect means as yet employed for its extraction, lead to the belief that capital and skill may be most profitably employed in the colony.

The earliest attention of this company will be directed to the richest parts of the Victoria settlement, hitherto known as Port Philip, as that most readily accessible, and promising the first and best results, and mining grants by purchase or lease will there be secured.

A carefully-selected staff of superintendents, miners, and artisans, will be sent out, with machinery and implements for raising, crushing, and washing the gold ore found in the quartz veins, or in the alluvial deposits, with orders to forward the produce in a concentrated state to the works in this country. Great improvements can be introduced upon the present modes of washing and extraction, and much loss and waste can be avoided.

The erection of the works necessary for the commencement of business in London, with the requisite machinery for amalgamation, and any other appliances for improved processes of reduction, will be proceeded with immediately.

Arrangements will be made, and connections formed with houses of the highest commercial standing in Australia, for the purchase of gold ores on commission; the ores to be transmitted to this country for reduction.

The company's works in London will thus be supplied partly by the ores raised from its own mines, and partly by those purchased from others in the colony, and probably also to a large extent by ores consigned to the company for reduction at a per centage upon the valuable contents.

This branch of the undertaking will materially assist the various mining companies which have been already formed, by creating a market for the rich ores which they may raise; it will stimulate efforts for improved transport from the mines to the coast and to this country; it will furnish a considerable item in the freight of homeward-bound vessels; it will diminish the pressure on the labour market in the colonies; and it will create a trade, which must of necessity become very large and important.

There is reason to believe, therefore, that a company formed with these views and objects, under the supervision of a board of directors, sufficient, on the one hand, to guarantee to the shareholders that the funds will be honestly and judiciously applied, and on the other, to give confidence to the local authorities and colonists, will receive an amount of favour not hitherto extended to any similar enterprise, and will open unusual sources of wealth to the shareholders. The promoters are, however, unable, and will not, therefore, pretend to form calculations or estimates of profit based upon specimens or imaginary quantities of ore (delusive as such statements always are to those unacquainted with mining affairs, and valuable to those who understand them); but relying upon the evidence before them, they reckon upon a very large return for the capital invested, and, therefore, do not hesitate to place the undertaking with every confidence before the public.

The names of the trustees, directors, and auditors will be published in a few days; in the meantime, applications for shares may be made to Messrs. John Taylor and Sons, 6, Queen street-place; or to Messrs. Hill, Fawcett, and Hill, 29, Threadneedle-street.

January 30, 1852.

## ED. J. DENT has REMOVED from 82 to 61, STRAND

(being 21 doors nearer to Charing-cross, and directly opposite Bedford-street), and solicits an INSPECTION of his extensive STOCK of CHRONOMETERS, WATCHES, and CLOCKS, as above; also at No. 33, COCKSPUR-STREET, and No. 34, ROYAL EXCHANGE (Clock Tower area).

## IMPROVED LIFTING JACKS.

MANUFACTURED BY

W. and J. GALLOWAY,

PATENT RIVET WORKS,

MANCHESTER.

The attention of parties who employ

Lifting Sacks,

is respectfully requested to the superiority of those annexed, over those hitherto in use.

IMPROVED RATCHET JACK.

HALEY'S PATENT LIFTING JACK.

W. and J. GALLOWAY, PATENT RIVET WORKS, MANCHESTER.

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HALEY'S PATENT LIFTING JACK.

W. and J. GALLOWAY, PATENT RIVET WORKS, MANCHESTER.

The attention of parties who employ

Lifting Sacks,

## DRAKE WALLS MINING COMPANY.—At the ANNUAL

MEETING of the shareholders in this Company, held at their offices, Salvador-house, on Friday, the 30th January, 1852.

PETER STAINSBY, Esq., in the chair.

Mr. Watson read the notice convening the meeting, the reports, and financial statement, when it was

Resolved.—That the reports and accounts now read be received, adopted, and entered in the Company's cost and transfer-book.

No communication having been received from the parties in arrears of calls on thirty-two shares, it was—

Resolved.—That the above thirty-two shares be and are hereby forfeited, in accordance with the 26th rule of the Company.

Resolved.—That a dividend of 5s. per share be paid, and that the balance of the sum of £292 18s. 4d. be carried to the next account.

Resolved.—That the best thanks are presented to Mr. Johnson, for the ability and attention which he has manifested in his superintendence of the affairs of this Company, and for the improvements he has effected in the dressing of the ore.

Resolved.—That this meeting is desirous of expressing its warmest thanks to the Committee of this Company, and especially the Chairman, for the steady perseverance with which they have overcome the difficulties of the enterprise, and brought the mine into a profitable state.

## WEST WHEAL RUSSELL.—At a GENERAL MEET-

ING of the shareholders in this Company, held at their offices, Salvador-house, on Friday, the 30th January, 1852.

PETER STAINSBY, Esq., in the chair.

Mr. P. Watson read the notice convening the meeting, and the Chairman the agents' reports and financial statements, when it was

Resolved.—That the reports and accounts now read be received, adopted, and entered in the Company's cost and transfer-book.

Resolved.—That 169 shares in default be, and are hereby, forfeited, in accordance with the 25th rule of the Company, and sold by public auction.

Resolved.—That the thanks of this meeting be given to the Chairman and Directors, for their continued services and watchful care over the Company's affairs.

## WHEAL LANGFORD MINING COMPANY.—At a

SPECIAL GENERAL MEETING of the shareholders of this Company, held at the Offices of the Company, 34, Threadneedle-street, this 29th January, 1852.

STEPHEN BROAD, Esq., in the chair.

Resolved.—That the holders of shares in this mine are requested to forward the same to this office, on or before Thursday, the 13th day of February, in order that they may be exchanged for the certificates of WHEAL LANGFORD AND BARING UNITED MINES; if not so exchanged, a motion will be submitted to the General Meeting for the forfeiture thereof.

HENRY MOLYNEUX, Secretary.

## DRIFT MOOR CONSOLS MINE.—This Mine is in the

parishes of MADRON, SANCREE, and PAUL, CORNWALL, and has been purchased of the former shareholders, and put on in 128 shares, 40 of which are held in Cornwall, and the remaining shares are offered to the public.

There would be no objection to appointing a committee in London for the transaction of business, if desired.

£1200 have been expended in opening ground, erecting a water wheel, stamps, pumping machine, &c. The engine-shaft is sunk about 18 fathoms, and a level has been driven about 25 to 30 fathoms, at a depth of 13 fathoms from surface; lode above 8 feet wide. Some tons of tin, of very superior quality, have been returned, but at so shallow a depth much cannot be expected. This shaft is close to the stamps, consequently all carriage is saved. A large stream of water runs through the sett, working an 18-foot wheel, drawing the water from the mine, and stamping the stuff. The stamps have six heads only, but there is water enough to work four times as many, if required; and it is supposed that, by the same wheel, the water might be drawn from 20 fathoms deeper.

There are several lodes in the sett, which is very extensive, being full a mile long by half a mile broad. Two shafts have been sunk on the lode at Drift 5 fathoms deep, and a level driven from one to the other. A winze has been sunk below this level, and the lode found to be very good. Abundance of tin has been returned by streaming in this sett; and it is generally believed that it will make ample returns from the various lodes which have been found in it. There is ground now open at the engine shaft 8 fms. high, and 20 to 25 fathoms or more in length, which will well pay for stopping, but to open more ground an outlay must be made, where places will be found to put men on tribute, and large returns of ore may be expected.

For the obtaining of shares parties are referred to B. P. Batten, Esq., 1, Crown-court, Old Broad-street; or to Mr. Tonkin, 315, Oxford-street.

## BRAICH GOCH SLATE AND SLAB QUARRIES,

TAL-Y-LLYN, MERIONETHSHIRE, NORTH-WALES.

Now being worked on the Cost-book Principle.

Capital £14,000, in shares of £1 each.—Deposit 10s. per share.

SECRETARY.—Mr. John Fish.

OFFICES.—No. 4, CUSHION-COURT, OLD BROAD-STREET, LONDON.

A company having been formed for working the above extensive quarries, as advertised a short time since, has recently been joined by some highly-respectable



PENBROKESHIRE.—VALUABLE ANTHRACITE COLLIERY ON ONE OF THE ESTUARIES OF MILFORD HAVEN TO BE LET.

**TO BE LET, ON LEASE,** all the rich and valuable **VEINS, or SEAMS, of COAL** under the **NASH ESTATE**, known as **SPRINKLE-PILL** AND **NASH COLLIERY**, in the parish of **LANGLAND**. These valuable **COLLIERIES** comprise, within the limits of 53 fathoms deep, the several **SEAMS, or VEINS, of COAL**, as follows:—

1. **CRABTREE VEIN**, 3 to 8 feet, with about 1-10th coal—irregular as to the depth. This vein has been partially worked.
2. **ROCK VEIN**, 15 to 16 fathoms below surface, 5 feet thick, of superior quality—yields nearly one-half of coal.
3. **TUMBLING VEIN**, about 28 fathoms below surface, varying as to thickness, but is supposed to average from 4 to 10 feet thick.
4. The **LOW VEIN**, 37 fathoms deep, from 18 inches to 2 feet thick, with quarter coal, of the very best quality.
5. The **MAIN VEIN**, 51 fathoms deep, from 5 to 9 ft. thick, and yields a quarter coal, and this, with the 2-foot vein, about 3 fathoms deeper, has been worked by the adjoining proprietors up to the boundary, and this fully ascertained.

The above veins are supposed to extend under about 200 acres; they are the westward continuation of the celebrated **Landshipping Colliery**, and extend from **SPRINKLE-PILL** to **CLARESTON**; bounded on the north by the **Hook and Freystrop Estates**, where the collieries have been worked for more than a century.

A few pits, in well-selected situations, will win the whole workings, and the estates being on the banks of **Milford Harbour**, every possible advantage is naturally afforded for carrying on an extensive trade at a comparatively small expense.

For further particulars apply to **Arthur Lort Phillips, Esq., solicitor**, 11, King's Bench Walk, Temple, London; or to **Mr. H. P. Goode**, land agent, Haverfordwest.

## THE WASHINGTON CHEMICAL COMPANY, NEWCASTLE-ON-TYNE.—MANUFACTURERS OF PATINSON'S OXICHLORIDE OF LEAD.

The **WASHINGTON CHEMICAL COMPANY** having, during the last year, established a **MANUFACTORY OF PATINSON'S OXICHLORIDE OF LEAD**, on a large scale, and being able to supply it with regularity, and to execute orders without delay, now proceed to bring this new and valuable preparation of lead before their friends and the public, quite sure that it will not, in the present age, be condemned because it is new; and that, if judged by its merits, it must make its way, and finally take its place as one of the important manufactures of this country.

Patinson's Oxichloride of Lead is a chemical combination of one equivalent of chloride of lead, and one equivalent of oxide of lead—it being well-known that common white lead is a chemical combination of one equivalent of oxide of lead, and one equivalent (or thereabouts) of carbonic acid, constituting what is called in chemical language, carbonate of lead.

Now, there is no reason to conclude that carbonate of lead is the only compound of lead valuable as a paint, and still less that it should be the compound of lead for that purpose. In point of fact, it is not so, for the newly discovered Oxichloride, in most, if not in all respects, is far superior; its colour is brilliantly white, and in a number of cases it has been tried against the best white lead that could be obtained; and after a period of upwards of two years it has been found to retain its white colour considerably better than the lead against which it was tried.

But the chief, and by far the most important, advantage it possesses, is its remarkable and very decided superiority of body—by which term the power of covering surface well and extensively is understood among painters. The attention of the discoverer was at a very early period drawn to this circumstance, and since that time the **WASHINGTON CHEMICAL COMPANY** have had abundant opportunities of placing its superiority, in this important particular, beyond all doubt. They have themselves performed a number of experiments, and have also caused a number of experiments to be performed, in the large way, by various practical men, to ascertain accurately its covering power as compared with the best white lead; and they now state the proportions to be as **SIXTY TO ONE HUNDRED—THAT IS, 60 LBS. OF OXICHLORIDE PAINT WILL COVER AS MUCH SURFACE AS 100 LBS. OF THE BEST WHITE LEAD.**

—the saving of cost being in the same proportion; besides this, the coating is thicker and more protective, both in and out of doors, as the Oxichloride dries into a hard, tenacious layer, more like an enamel than paint.

In using the Oxichloride, no difference in the materials with which it is mixed is required—oil and turpentine being employed as usual both for work technically called *putting*, and for work intended to be varnished.

For the use of paper-stainers and leather dressers the Oxichloride is found to be peculiarly suitable.

The **Washington Chemical Company** strongly recommend this newly discovered substance to the notice of consumers, both on account of its economy and its intrinsic good qualities as a paint.

OFFICE IN LONDON (MR. RICHARD COOKE), No. 7, SISE-LANE.  
Office of the **Washington Chemical Company**,  
73, Grey-street, Newcastle-on-Tyne, Jan. 1, 1852.

## THE MARYLEBONE GAS CONSUMERS' COMPANY.

Capital £100,000, in 10,000 shares, of £10 each.—Deposit 1s. per share. To be paid on allotment.—Capital to be paid up.—First call, £1 per share. Other calls not to exceed £1 per share, one month at least to intervene between each call. (With power to increase the capital to £150,000).

To be incorporated under the provisions of the Joint-Stock Companies' Acts, until a Special Act shall be obtained, if hereafter found expedient. The liability of the shareholders limited to the amount of their respective shares.

**THE HON. PHILIP PLEYDELL BOUVERIE**  
**HENRY THOBY PRINSEP, Esq.**  
DIRECTORS.

**HENRY THOBY PRINSEP, Esq.**, a Director of the East India Company  
**JOHN CROSS, Esq.**, Avenue Villa, Regent's-park  
**BENJAMIN SHAH, Esq.**, Kilburn Priory, Edgware-road  
**WILLIAM EALES, Esq.**, Finchchurch-street, merchant  
**WM. YATES FREEBODY, Esq.**, C.E., Duke-street, Westminster  
**GEO. HINTON BOVILL, Esq.**, a Director of the Great Central Gas Consumers' Company

**ENGINEER—T. A. Hedley, Esq., C.E.**  
**SOLICITOR—J. B. Holman, Esq., 15, Bedford-row.**  
**BANKERS—Messrs. Bouverie and Co., 11, Haymarket.**  
**SECRETARY pro tem.—T. A. Hedley, Esq.**

**OFFICES.—27, EDWARD-STREET, PORTMAN-SQUARE.**  
The object of this association is to supply the inhabitants of Marylebone with good gas at a cheap rate, and the principles on which it is founded are—

To invite the co-operation of the consumers, and thus to distribute among them as shareholders the profits which may be derived from them as consumers; to carry on all the latest improvements, and all the resources of practical science for the production of gas combining great purity with a high illuminating power; to supply this gas at a price considerably below the existing rate, not exceeding 4s. per 1000 cubic feet; to lay on services and furnish meters gratis; to limit the divisible profits to 10 per cent., and to apply any surplus beyond that rate, after providing against contingencies by the creation of a limited reserve fund, to the reduction of price; to insure a reasonable and effective control over the expenditure, by the appointment of independent auditors; to limit the liability of the shareholders to the amount of their respective subscriptions.

The directors, in accordance with their determination to allot no shares, nor to receive any money, in respect thereof, until they were satisfied that the above objects could be realised, canvassed the gas consumers and memorialised the vestry of the parish; the result of which is, that they have obtained upwards of 3200 written contracts, and received upwards of 600 verbal promises, from gas consumers, to take the company's gas, the revenue from which, at the proposed price, will, it is calculated, suffice for payment of 10 per cent. on the capital, after liquidation of the cost of the gas, and the working expenses of the company, and the assurance of the vestry that in the month of March next they will be permitted to lay down the mains and pipes of the company throughout the whole extent of the parish, a permission which the vestry have accorded upon the report and recommendation of a committee appointed for the purpose.

As it is intended to carry the undertaking into immediate execution, it is particularly requested that all applications for shares be forthwith made in the following form, addressed to the secretary, at the office of the company, 27, Edward-street, Portman-square.

**FORM OF APPLICATION FOR SHARES.**  
TO THE DIRECTORS OF THE MARYLEBONE GAS CONSUMERS' COMPANY.

I request you will allot me \_\_\_\_\_ shares, of £10 each, in the above undertaking, and I agree to accept such shares, or any less number that may be allotted to me, and to pay the deposit and calls thereon as they respectively fall due, and also to execute the Deed of Settlement when required.—Dated \_\_\_\_\_ day of \_\_\_\_\_, 1852.

Name and surname in full \_\_\_\_\_  
Residence \_\_\_\_\_  
Description \_\_\_\_\_  
Reference \_\_\_\_\_

N.B.—If the applicant is a gas consumer in St. Marylebone, no reference is required.

## BRISTOL AND EXETER RAILWAY.—Notice is hereby given, that the next HALF-YEARLY GENERAL MEETING of proprietors of this Company will be HELD, in pursuance of the Act of Parliament, at the White Lion Hotel, in the city of Bristol, on Thursday, the 26th of February, at Twelve o'clock, for the Election of Three Directors, in the room of those who retire by rotation, and for other affairs.—The chair will be taken at Twelve o'clock precisely.

The three retiring directors are eligible for re-election. The transfer-books will be closed on the 16th of February, and not be re-opened until after the said half-yearly meeting on the 26th of February.

The interest to the 31st Dec. 1851, on Perpetual Preference 4 per Cent. Shares and Stock, will be remitted at the same time as the dividends on old Consolidated Stock.

Bristol Terminus, Jan. 28, 1852. J. B. BADHAM, Secretary.

## DICKFORD'S PATENT SAFETY FUSE.—The Patentees of the ORIGINAL, and only real, SAFETY FUSE, beg to inform Merchants, Mine Agents, Railway Contractors, and all persons concerned in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE has now a thread wrought into its centre, which being patent right, infallibly distinguishes it from all imitations, and ensures the continuity of the gunpowder. The Safety Fuse is now protected by a Second Patent, and manufactured by greatly improved machinery.

BIOKFOED, SMITH, DAVEY, Gamborne, Cornwall.

## SAFETY FUSE.—Messrs. WILLIAM BRUNTON AND CO., PENHALLIC, near REDRUTH, CORNWALL, MANUFACTURERS of FUSE of every size and length (as exhibited the Great Exhibition of 1851), beg to inform their Friends in Cornwall, Devon, Wales, Ireland, and every other part of the Globe, that they are prepared to EXECUTE UNLIMITED ORDERS for SUPPLYING FUSE of their own manufacture, and upon warrant that will be proved equal to, if not better, than any that is to be procured elsewhere, and that Mr. J. R. PIKE is now upon his journey through the United Kingdom, and will call to solicit further orders, which they are requested to reserve, or otherwise apply by letter, direct to the Manufacturer.

## PATENT SAFETY FUSE.—MR. WILLIAM R. BANT would direct the attention of MINING COMPANIES and OTHERS to the FACT of his OWNING a PATENT for the MANUFACTURE of SAFETY FUSE in SPAIN, and that he will be happy to attend to any communications which may be addressed to him for the SUPPLY thereof.

No. 74, Calle de San Miguel, Carthagena, October 30, 1851.

## MUSEUM OF PRACTICAL GEOLOGY, LONDON.

**Government School of Mines, AND OF SCIENCE APPLIED TO THE ARTS.**

LECTURES TO WORKING MEN, ILLUSTRATIVE OF THE COLLECTIONS IN THE MUSEUM.

MONDAY, FEBRUARY 9, 1852.  
GLASS AND ITS COMPOSITION.....By LYON PLAYFAIR, F.R.S.

MONDAY, FEBRUARY 16, 1852.  
WHY FOSSILS ARE COLLECTED AND EXHIBITED.....By ED. FORBES, F.R.S.

MONDAY, FEBRUARY 23, 1852.  
PHOTOGRAPHY AND ITS APPLICATIONS.....By ROBERT HUNT, Keeper of Mining Records.

MONDAY, MARCH 1, 1852.  
ON THE UTILITY OF GEOLOGICAL MAPS.....By A.C. RAMSAY, F.R.S.

MONDAY, MARCH 8, 1852.  
ON THE MODE OF OCCURRENCE OF METALS.....By W. W. SMYTH, M.A.

MONDAY, MARCH 15, 1852.  
ON IRON.....By JOHN PERCY, M.D., F.R.S.

The Lectures will be given in the Museum, Jernyn-street, St. James, on each of the above evenings, at Eight o'clock precisely.

As these Lectures are intended for Working Men only, it will be necessary for those who apply for admission to show that they are really Artificers.

Admission cards may be obtained at the Museum daily, from 10 A.M. to 4 P.M., and on Mondays and Fridays, from 6 to 8 P.M., on payment of a registration fee of Sixpence for the whole course.

The Lecture Theatre will hold only 450 persons; the number of admissions, therefore, will be necessarily limited.

H. T. DE LA BECHE, Director.

## ROYAL COLLEGE OF CHEMISTRY, OXFORD STREET, LONDON.

THE PRACTICAL COURSE OF INSTRUCTION IN THIS INSTITUTION is under the direction of Dr. A. W. HOFMANN and assistants.

The SUMMER SESSION will commence on MONDAY, the 15th of March next, and end on Saturday, the 31st of July, 1852.

The fee for students working every day during the session is ..... £15 0 0  
Four days in the week ..... 12 0 0  
Three days in the week ..... 10 0 0  
Two days in the week ..... 8 0 0  
One day in the week ..... 5 0 0

Hours of Attendance from Nine to Five.

Further particulars may be obtained on application at the College.

## UNDER THE PATRONAGE OF HIS GRACE THE DUKE OF SUTHERLAND.

To be published by Subscription, of Twenty Guineas each,  
**A GEOLOGICAL MAP OF THE MINERAL DISTRICT**

OF NORTH STAFFORDSHIRE, comprising the Pottery Coal-field, with the surrounding Mineral District of Goldenhill, Kidsgrove, Biddulph, Norton, Longton, Apedale, and Silverdale, with all the Mines and Faults clearly delineated.

By WILLIAM S. COPE,  
Coal Viewer and Engineer, Hall Cottage, Hanley, Staffordshire.

Subscriptions received by Mr. Cope; or at the office of the *Mining Journal*, 26, Fleet-street, London.—A list of subscribers will appear with the work.

\*A specimen of the Map will lie for inspection at the office of the *Mining Journal* for a short time—due notice of which will appear.

## THE GOLD FORMATION FULLY EXPLAINED.

This day is published, price 16s. in 8vo., with Thirty Plates and numerous Woodcuts, A New Edition, enlarged.

## ON THE CONNEXION OF GEOLOGY WITH TERRESTRIAL MAGNETISM: showing the General Polarity of Matter, the Meridional Structure of the Crystalline Rocks, their Transitions, Movements, and Dislocations, including the Sedimentary Rocks, the Laws Regulating the Distribution of Metalliferous Formations, and other Terrestrial Phenomena.—By EVAN HOPKINS, C.E., F.G.S.

"Totally at variance with all the absurd dogmas connected with an igneous theory."  
"We must conclude at present by an unhesitating recommendation of the work to general perusal."—*Mining Journal*.

"We strongly recommend a complete study of this work from beginning to end, so that not only the connexion of all its parts may be clearly understood, but that the manner in which the author has throughout kept within the boundary of demonstration may be duly appreciated."—*Atlas*.

Richard Taylor, Red Lion-court, Fleet-street.

Now published, price 12s. 6d., and may be had from any respectable bookseller,  
**A PRACTICAL TREATISE ON THE WORKING AND VENTILATION OF COAL MINES, with SUGGESTIONS for IMPROVEMENTS in MINING.**

By JOHN HEDLEY, Colliery Viewer.  
London: J. Weale, No. 59, High Holborn.

## STEAM TO INDIA, CHINA, &c.—Particulars of the regular MONTHLY MAIL STEAM CONVEYANCE.

AND OF THE ADDITIONAL LINES of COMMUNICATION, NOW ESTABLISHED BY THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY, with the EAST, &c. &c. The Company book PASSENGERS, and receive GOODS AND PARCELS, as heretofore, for CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG KONG, by their steamers, starting from SOUTHAMPTON on the 30th of every month, and from SUEZ on or about the 8th of the month.

The next extra steamer will be dispatched from Southampton for Alexandria, on the 3d of April next, in combination with an extra steamer, to leave Calcutta on or about the 20th of March. Passengers may be booked, and goods and parcels forwarded by the extra steamer to or from SOUTHAMPTON, ALEXANDRIA, ADEN, CEYLON, MADRAS, and CALCUTTA.

BOMBAY.—The Company will book passengers throughout from SOUTHAMPTON to BOMBAY by their steamers leaving England on the 20th February, 20th March, and of alternate months thereafter—such passengers being conveyed from ADEN to BOMBAY by their steamers appointed to leave BOMBAY on the 17th February, 1st April, and of alternate months thereafter, and affording, in connection with the steamers leaving CALCUTTA on the 5th February, 20th March, and of alternate months thereafter, direct conveyance for passengers, parcels, and goods from BOMBAY and WESTERN INDIA.

Passengers for Bombay can also proceed by this Company's steamers of the 29th of the month to Malta, thence to Alexandria, by Her Majesty's steamers, and from Suez by the Honourable East India Company's steamers.

MEDITERRANEAN.—MALTA: On the 20th and 29th of every month.—CONSTANTINOPLE: On the 29th of the month.—ALEXANDRIA: On the 30th of the month.—(The rates of passage-money on these lines have been materially reduced.)

SPAIN AND PORTUGAL.—Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, on the 7th 17th, and 27th of the month.

N.B.—Steam ships of the Company now ply direct between Calcutta, Penang, Singapore, and Hong Kong, and between Hong Kong and Shanghai.

For further information and tariffs of the Company's recently revised and reduced rates of passage money and freight, and for plans of the vessels, and to secure passages, &c., apply at the company's offices, No. 122, Leadenhall-street, London; and Oriental-plate, Southampton.

## AMERICAN ANTI-FRICTION POWER.—for which was awarded the GREAT COUNCIL MEDAL at the late Exhibition.

The above INVENTION is fully PROTECTED BY PATENT in EUROPE, AMERICA, and the COLONIES abroad.

In America this POWER is APPLIED to the following ENGINES and MACHINES, various examples of which are on view at the office:—For Pounding and Shearing Metals, Presses for Paper, Cloth, Cotton Goods, Tobacco, Linseed, and other Vegetable Oils, Sperm and Animal Oils, Wine and Vegetable Oils, as Beet root, &c.—Embossing Machines—Printing and Stamping Presses—Engines for Moulding Glass, Earthenware, Bricks, Gutta Percha, &c.—Corrugating Metals—Straightening Railway Bars—Jack Screws—Forcing Railway Wheels on Axles—Railway Breaks—Hoisting Weights—Drawing Piles and Tree Stumps—Seal and Letter Copying Presses—Saw-mill Dogs—Vices—Striking and Spike and Nail Machinery—Bolt and Nut Machines—Steel-pan Cutters—Striking up Tin Plate—Jewellery Work, &c.

Engines and machines for the above purposes will be kept constantly on hand. Its application to machinery for other purposes, as raising Sunk Vessels, Graving Docks, &c., will be arranged for on liberal terms.

Particulars may be had, and machinery inspected, on application to Mr. Gwynne, 38, Parliament-street, Westminster.

## SMOKE-CONSUMING FURNACES (PETTIT'S PATENT), for Brass and Iron Foundries, Glass-houses, Alkali, Gas, and Lead Works, and for the Roasting and Smelting of Ores, &c.—The above FURNACES effect a large SAVING in FUEL, by completely consuming the smoke, and being of the most simple construction (requiring no moving machinery), can be erected at a cheaper rate than existing furnaces. The patentee is prepared to GRANT LICENSES under this valuable patent, for which, and any further information, apply to Mr. H. Green, No. 12, Upper Thames-street.

## TO PROPRIETORS OF STEAM-ENGINES, STEAM-PACKET COMPANIES, BREWERS, and COAL MERCHANTS.

In consequence of Notice issued under the Sowers Act of 1851, that on and after the 1st day of January, 1852, every furnace employed in the working of steam-engines shall be altered so as to consume its own smoke, the Undersigned would be glad to enter into an ARRANGEMENT with Proprietors of Steam-engines, Coal Merchants, or any party requiring coal, for a SUPPLY of their GELLIA STEAM-PACKET COAL, shipped at Swansea, which is perfectly free from smoke, thereby avoiding the necessity of altering their existing arrangements.

The coal has been satisfactorily tested at Portsmouth, and is in extensive use at one of the largest breweries in South Wales, as also by several steam-engines.

Swansea, Dec. 22, 1851.

## TO IRONMASTERS, RAILWAY DIRECTORS, ENGINEERS, and FOUNDERS.—The SUBSCRIBER having been appointed SOLE AGENT in LONDON for the SALE of MR. MORRIS STIRLING'S PATENT IRON, begs to intimate that he is prepared to SUPPLY Railway Companies, Engineers, and Founders, with the PATENT MALLEABLE and TOUNGHTENED CAST-IRON, and that all orders addressed to him for these, and also for RAILS, with Hardened Surfaces, shall have his prompt attention.

Specimens of the different Irons shown, and every information afforded, on application. Information as to the terms of License under Mr. Stirling's Patents will be given by the Subscriber, and also by Mr. JEE, C.E., 6, John-street, Adelphi. A. MACNAUGHT.

OFFICES.—2, Queen-street-place, Upper Thames-street.

WAREHOUSES.—Paul's Wharf, 20, Upper Thames-street.

## GLOBE INSURANCE, CORNHILL AND PALL-MALL, LONDON.—ESTABLISHED 1803.

(Empowered by Special Acts of Parliament.)  
FOR FIRE, LIFE, ANNUITIES, AND THE PURCHASE OF REVERSIONS AND LIFE CONTINGENCIES.

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Capital—ONE MILLION Sterling—the Whole Paid-up and Invested.

NEW TABLES of Life Premiums, on a Just and Liberal basis, have been adopted by the "GLOBE INSURANCE," combining the Plan of Participation, with those principles of So lidity and Security, which have distinguished the Company from its formation.

TWO SCALES of Premiums, Participating and Non-Participating.

TWO-THIRDS of Profits divided as BONDS every Seven Years.

ONE-THIRD of the Premium may remain Unpaid as a debt upon the Policy—and other facilities afforded to insureds.

Insurances taken to the extent of £10,000 on a Single Life.

Every class of FIRE and LIFE Insurance Business transacted.

Prospectuses with full Tables, and Details—and Forms, may be had at the offices of the Company; or of any of the Agents. (By Order of the Board.)

January, 1852. WILLIAM NEWMARCH, Secretary.

## FIFTH DIVISION OF PROFITS.

CLERICAL, MEDICAL, AND GENERAL LIFE ASSURANCE SOCIETY.—REPORT OF THE DIRECTORS, read at an extraordinary General Meeting, held at the Society's office, on the 1st day of January, 1852:—

In accordance with the provisions of the Deed of Constitution, the Directors have called the present meeting for the purpose of laying before the proprietors and the assured the result of an investigation of the Society's affairs for the five years ending June 30th, 1851.

On that day the Society had been in existence 27 years; and the result of this, the fifth investigation, affords, like each preceding one, abundant grounds of congratulation as to the past, and of hope for the future. This will be evident by a consideration of the following facts:—

The income of the Society, for the year ending June 30, 1846, was £116,360; that for the year ending June 30, 1851, £136,100; being an increase, since the last quinquennial division, of £19,800 per annum. In January, 1847, the surplus divided was £154,500.

The total assets on June 30th last, exclusive of the proprietors' paid-up capital of £50,000, were ..... £864,327 11 1

The total liabilities up to the same date were ..... 683,112 4 1

Leaving a surplus of ..... £181,215 7 0

The above surplus of £181,215 has now to be dealt with; but in order to avoid inconvenient fractions, the Directors have resolved to recommend to this meeting to divide the sum of £180,000.

In conformity with the provisions of the original Deed (which alone regulates the present division) one-sixth part of the profits is to be divided among the proprietors, and one-half among the assured for life. This will apportion to the proprietors £30,000, and to the assured for life £90,000, leaving one-third of the said profits, amounting to £60,000, to be laid by as a reserve fund. The proprietors will thus receive a bonus of £6 per share, and the assured a sum of £131,125, being the equivalent in reversion to the above amount of £90,000.

This sum of £131,125 will be added to the policies, and be payable at the death of the respective parties, and will form an addition, varying with the different ages, from 24½ to 55 per cent. on the premiums received during the last five years.

In estimating the amount of liabilities, it is important to observe that each policy has been valued separately; that there has been no encroachment on, or anticipation of, future profits; and that a mode of valuation has been adopted, whereby a larger sum than is usual with most other offices, has been retained, to meet such claims as may arise. This will appear by the following examples:—

Sum set aside as the value of a policy for £1000.

By offices valuing by the Northampton Three per Cent. Table. By the Mode adopted by this Office. Difference in favour of this office at future divisions.

£ s. d. £ s. d. £ s. d.

Effect at the age of 40, after 10 years ..... 152 3 7 158 6 5 6 4 10

Effect at the age of 50, after 10 years ..... 197 17 3 215 2 0 17 4 9

Effect at the age of 60, after 10 years ..... 282 7 5 326 3 0 43 15 7

The proprietors and the assured are aware that hitherto the profits at each division could only be appropriated in the proportions of one-sixth to the proprietors and three-sixths to the assured, while the remaining two-sixths were thrown back into the general assets of the society, and formed an ever accumulating reserve fund.

The consequence has been, that the reserve fund, which at the division at the end of the first seven years in June, 1831, was only ..... £5,000 0 0

Had increased in 1836 to ..... £6,500 0 0

1841 to ..... 29,500 0 0

Ditto 1846 to ..... 51,500 0 0

And in June, 1851, ..... 60,000 0 0



## THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Last Price.	Present Price.	Dividends per Share Declared.	Last Paid.
5190	Alfred Consols (copper), Phillack	2 3	17	17 1/2	2 14 0 to Jan., 1852	20 9 0 Jan.
1344	Ally-Crib (silver-lead), Talyllyn, Wales	1 1/2	5 1/2	5 1/2	0 7 6 to Oct.	0 5 0 Jan.
1244	Ballawidden (tin), St. Just	1 1/2	10	10	0 6 to Jan.	0 4 to Jan.
4000	Bedford United (copper), Tavistock Devon	3 1/2	5 1/2	5 1/2	0 3 to Dec.	0 3 to Dec.
5000	Black Craig (lead), Kirkcudbrightshire	5	4 1/2	4 1/2	0 2 6 to Nov.	0 2 6 to Nov.
64	Boscawell Downs (tin), St. Just	100	100	100	750 0 to May, 1849	5 0 to Nov.
100	Botalack (tin and copper), St. Just	182 1/2	205	205	445 0 to 5th Nov., 1851	5 0 to Nov.
1000	Bryntall, Llanidloes, Montgomeryshire	2 1/2	14	14	0 5 to end June	0 5 to June
1000	Callington (lead and copper), Callington, Cornwall	30	4 1/2	4 1/2	0 5 to Sept., 1847	0 5 to Sept.
1000	Calstock United (copper)	4 1/2	4 1/2	4 1/2	0 5 to Oct., 1851	0 5 to Oct.
1000	Carn Brea (copper and tin), Illogan	15	12	12	206 0 to Sept., 1851	2 0 to Sept.
1000	Comford (copper), Gwennap, Cornwall	75	90	90	13 0 to Oct., 1851	2 0 to Oct.
236	Condarro (copper and tin), Camborne, Cornwall	20	105	105	6 0 to 1851	5 0 to 1851
1000	Cwmystwith (lead), Cardiganshire	60	28 1/2	28 1/2	255 10 to Jan., 1852	6 0 to Jan.
1024	Devon Great Consols (copper), Tavistock	1	28 1/2	28 1/2	855 14 to 1847	—
1000	Dolcoath (copper and tin), Camborne	252	6 1/2	6 1/2	233 0 to 1843	—
3000	Drake Walls (tin and copper), Calstock	6 1/2	11 1/2	11 1/2	242 10	—
1000	East Pool (tin and copper), Pool, Illogan, Cornwall	24 1/2	150	150	2350 0 to Jan., 1852	7 10 to Jan.
1000	East Wheal Crofty (copper), Illogan, Cornwall	125	425	425	—	—
1000	East Wheal Rose (silver-lead), Newlyn	40	39	39	—	—
494	Fowey Consols (copper), Fowey, Cornwall	40	39	39	—	—
3715	General Mining Company for Ireland (copper and lead)	1 1/2	3	3	45 per cent. to June	10 per cent. 1 year
1000	Goginan (lead), Cardiganshire, Wales	5	150	150	353 6 8 to January	0 2 to Sept.
95	Great Consols (copper), Gwennap, Cornwall	1000	200	200	0 2 to Sept.	0 2 to Sept.
11000	Great Polgoth (tin), St. Austell	3	160	160	120 0 to Nov.	0 2 to Nov.
119	Great Work (tin), Gernoe, Cornwall	100	4	4	0 7 6 to Aug.	0 2 6 to Aug.
1024	Herdfoot (lead), near Redruth, Cornwall	8 1/2	11 1/2	11 1/2	25 0 to Feb., 1844	Feb., 1844
1000	Holmhead (lead and copper), Callington	24	7 1/2	7 1/2	3 0 to 1847	3 0 to 1847
1000	Holyford (copper), Holyford, Cornwall	11	11	11	0 5 to Sept., 1851	0 5 to Sept.
746	Kirkcudbrightshire (copper), Kirkcudbright	9 1/2	4 1/2	4 1/2	0 2 to 1st Aug.	0 10 to Aug.
1000	Lewis (tin and copper), St. Erth	17	11	11	1034 0 to 1st Dec.	0 2 to Dec.
1000	Levant (copper and tin), St. Just	2 1/2	140	140	640 0 to 1st Aug.	30 0 to Aug.
1000	Liburne (lead), Cardiganshire, Wales	75	650	650	1 0 6 to July	0 4 6 to July
5000	Low's Patent Copper Smelting Company	9	10	10	7 10 6 to Feb., 1847	7 p. ct. p. annum
20000	Mining Company of Ireland (copper, lead, and coal)	7	5 1/2	5 1/2	225 0 to 1st Nov.	7 10 to Nov.
200	North Pool (copper and tin), Pool	22 1/2	170	170	235 0 to Jan.	4 0 to Jan.
140	North Roskear (copper), Camborne	10	180	180	414 0 to Jan.	40 0 to Nov.
6000	North Wheal Basset (copper and tin), Illogan	—	700	700	1 15 to June	0 10 to 4th Ju
1000	Par Consols (copper), St. Blazey	55 1/2	210	210	10 0 to March 3	5 0 to March
1100	Perran St. George (copper and tin), Perranarabudloe	21 1/2	240	240	18 14 6 to Nov.	0 10 to Nov.
2000	Phoenix (copper and tin), Linkinhorne	30	240	240	260 0 to Nov.	2 10 to Nov.
500	Providence Mines (tin) Uny Lelant	20 1/2	110	110	33 0 to 5th Dec.	3 0 to Dec.
256	South Caradon (copper), St. Cleer	2 1/2	140	140	112 15 to Jan.	5 0 to Jan.
256	South Tolveg (copper), Redruth, Cornwall	16	140	140	4 0 0 to Dec.	0 10 to Dec.
218	South Wheal Frances (copper), Illogan	80	100	100	0 10 0 to Jan.	0 10 0 to Jan.
1024	Spearhead Consols (tin), St. Just, Cornwall	1 1/2	11	11	850 0 to Aug.	4 0 to Aug.
1024	St. Aubyn and Grylls (copper and tin)	3	11	11	—	—
94	St. Ives Consols (tin), St. Ives	80	10	10	2 11 to July, 1849	—
1000	Tamar Consols (silver-lead), Boscawell	15	3 1/2	3 1/2	5 17 6 to Sept.	0 10 to Nov.
5000	Tinctor (copper and tin), near Pool, Illogan	7	10 1/2	10 1/2	14 7 6 to Nov.	0 10 to Nov.
512	Trehan (silver-lead), Menheniot	5	5	5	1 3 to Oct., 1847	0 5 Oct. 1847
5000	Treleigh Consols (copper), Redruth	6	200	200	402 10 to 5th April	—
95	Tresavean (copper), Gwennap, Cornwall	32 1/2	215	215	261 5 to Jan.	8 0 to Jan.
120	Trethellan (copper), Gwennap, Cornwall	5	110	110	5 0 to Dec.	5 0 to Dec.
120	Trevelick and Barrier (copper), Gwennap	130	80	80	2 10 to Sept.	2 10 to Sept.
1000	Trumpet Consols (tin), near Helston	95	3 1/2	3 1/2	2 6 to March	0 5 to March
300	United Mines (copper), Gwennap	80	119 121	119 121	169 5 to Dec.	4 0 to Dec.
1024	Wellington (copper and tin), Perranarabudloe	7 1/2	105 10 15	112 114	10 0 to Nov.	5 0 to Nov.
256	West Caradon (copper), Liskeard, Cornwall	30	370	390 400	265 0 to 3d Dec.	10 0 to 3d Dec.
512	West Providence (tin), St. Erth	10	9	9	135 0 to Jan.	12 10 to Jan.
256	Wheal Basset (copper), Illogan	10 1/2	550	550	—	—
256	Wheal Brewer (copper), Gwennap, Cornwall	2	20	20	—	—
256	Wheal Buller (copper), Redruth	5	31	31	—	—
124	Wh. Castle and Boscawell (tin and copper)	5	70	70	—	—
100	Wheal Friendly (tin), St. Agnes	12 1/2	73	73	—	—
120	Wheal Golden Cross (copper-lead), Perranarabudloe	12 1/2	31	31	—	—
5000	Wheal Lovell (tin), Helston	33	135	135	—	—
112	Wheal Margaret (tin), Uny Lelant	79	45	44 45	—	—
512	Wheal Mary Ann (lead), Menheniot	5 1/2	230	230	—	—
40	Wheal Owles, St. Just, Cornwall	140	55	55	—	—
940	Wheal Reeth (tin), Uny Lelant	20 1/2	200	200	—	—
198	Wheal Seta (tin and copper), Camborne, Cornwall	107	22	22	—	—
520	Wheal Trelawny (silver-lead), Liskeard, Cornwall	8 1/2	28 1/2	28 1/2	—	—
1024	Wheal Trelawny (tin and cop.), Gwennap, Cornwall	9 1/2	29	29	—	—
5000	Wicklow (copper), Wicklow	5	—	—	—	—

## FOREIGN MINES.

Shares.	Mines.	Paid.	Last Price.	Present Price.	Dividends per Share Declared.	Last Paid.
5000	Alcon Mining Company (copper), Norway	2 1/2	2	2	3 0 0 to Mar., 1848	—
10000	Brazilian Imperial (gold), Brazil	24 1/2	14	14	3 17 6 to Dec., 1844	—
10000	Cobre Copper Company (copper), Cuba	40	33 1/2	33 1/2	61 10 0 to Jan., 1852	27 to Jan.
10000	Copiapu Mining Company (copper), Chile	14 1/2	4 1/2	4 1/2	3 10 0 to Oct., 1850	28 to Oct., 1850
20000	General Mining Company (iron & coal), Nova Scotia	30	9 1/2	9 1/2	6 10 0 to June, 1851	10 to June, 1851
2700	Magnato (gold), Columbia	2 1/2	12	12	3 0 0 to Dec., 1851	17 to Dec., 1851
5051	Mexican Company (silver), Mexico	50 1/2	—	—	0 8 6 end of 1846	46 in 1846
17000	Royal Santiago (copper), Cuba	12	4 1/2	4 1/2	33 4 0 to July, 1846	—
11000	St. John del Rey (gold), Brazil	15	23 1/2	23 1/2	15 17 6 to Dec., 1851	17 to Dec., 1851
43174	United Mexican (silver), Mexico	28 1/2	—	—	1 12 6 to Feb., 1850	75 to Feb., 1850

## MINES WHICH HAVE SOLD ORES.

Shares.	Mines.	Paid.	Last Price.	Present Price.
940	Balnoon Consols (tin), Uny Lelant	—	3	—
508	Bell and Llan (copper), Gwennap	6	2 1/2	—
2000	Bishopston (silver-lead), Glamorganshire	4	4 1/2	—
4000	Blancavon (iron), South Wales	50	12	—
1024	Bodinnal (copper), Wadebridge	7	5 1/2	—
1024	Bodinnal Wheal Mary (copper), Bodinnal	10	5	3 1/2
120	Bodinnal and Nampson (tin), St. Just	30	18	—
1024	Boringdon Park (silver-lead), Plympton	3	5	3 1/2
240	Boscawell (tin), St. Just	15	5	—
2400	Boscon (tin), St. Just	1	2 1/2	—
5250	Bottle Hill (copper), Plymouth	1	2 1/2	—
14000	Braich Goch Slate and Slab Quarries	—	—	—
3000	Brodford (lead), Wales	1 1/2	1 1/2	—
2890	Bryn-Arian (lead), Cardiganshire	2 1/2	1 1/2	1 1/2
7500	Bysparvo (tin and copper), Gwennap	1	7	—
2000	Bwlch Consols (silver-lead), Cardiganshire	4	7	—
4000	Calstock Consols (copper), Camborne	4	1 1/2	—
1000	Camborne Consols (copper), Camborne	7 1/2	4 1/2	5 6
3000	Carbona (tin and copper), Crovan	4 1/2	4 1/2	—
3000	Cartlow Consols (cop. & lead), Wadebridge	5 1/2	4	—
1056	Carvannall (copper), Gwennap	4 1/2	15	14
300	Carn Bruno (lead), Cardiganshire	21	49	50
1024	Chyprasse (tin and copper), St. Enoder	3 1/2	5 1/2	—
2000	Cod Mawr Pool (lead), Llanwrst	10	10	10
2510	Cook's Kitchen (copper and tin), Illogan	15 1/2	4 1/2	—
1000	Copper Bottom (copper), Crovan	10	3 1/2	—
900	Court Grange (silver-lead), Cardiganshire	10	12	—
1000	Craig-y-Mwyn (lead), Llanidloes, Mont.	8 1/2	10 1/2	—
356	Craze and Wales (copper), Camborne	21 1/2	27 1/2	—
1000	Cwm Daren, Wales	2	3 1/2	—
1000	Cwm Erth (lead), Cardiganshire	7	3	—
3000	Cyrranedd Fawr (lead), Llanogryn	1 1/2	5	—
3000	Dalriach (copper and lead), Brecon	1 1/2	2	—
1000	Daron (silver-lead), Cardiganshire	10	2	—
7100	Dorwent (silver-lead), Durham	2 1/2	2 1/2	—
4150	Duron and Courtenay Consols (copper)	2 1/2	6 1/2	7
1024	East Alfred Consols (lead & cop.)	10	7	—
5120	East Basset (copper) Redruth	15	2	—
1024	East Grenville (copper), Tavistock	6	2	—
300	East Daren (lead), Cardiganshire	19	70	75 80
4000	East Gunns Lake Junction (copper)	1	14	—
512	East Seta (tin and copper), Redruth	8 1/2	7	—
9000	East Tamar Consols (sil.-lead), Beerferris	1 1/2	4	—
2048	East Wheal George (cop.), Walkhampton	1	2 1/2	—
512	East Wheal Lelaure (copper), Perran	14	10	—
1024	East Wheal Margaret (tin and copper)	10	3 1/2	—
1340	Esgrig Llew Llanfihangel-y-Crothyn	6 1/2	8 1/2	—
3000	Fanton Pnery (coal and ironstone)	6	8 1/2	—
12000	Gall-y-Maen (silver-lead), Merioneth	2	2 1/2	—
5000	Garreg (lead), Flint	1 1/2	1 1/2	—
2500	Georgia Consols (tin), St. Ives	4 1/2	5	—
256	Gonnamou (copper), St. Cleer	48	12	—
243	Grambler & St. Aubyn (copper) Redruth	80 1/2	22 1/2	—
3000	Great Cwawar (silver-lead), Merioneth	21 1/2	2 1/2	—
5120	Great Wheal Badden (tin and silver-lead)	7	3	2 1/2
1024	Gustavus Mines (copper), Camborne	2	11	—
512	Hawke's Point (copper), Uny Lelant	8 1/2	5 1/2	—
4000	Hilgaston Down Cons. (copper), Calstock	2 1/2	3 1/2	—
873	Keswick (lead), Portscallo, near Keswick	13	4	—
1024	La Min (Gwennap), tin and copper	3 1/2	6	—
1744	Lamherose Wheal Martin (copper & tin)	14	4 1/2	—
252	Lanarth Consols (copper), Gwennap	64	14	14 1/2
256	Lelant Consols (tin), Uny Lelant	21 1/2	14	—
3000	Llanidloes (lead), Cardiganshire	21 1/2	14	—
16000	Marko Valley (copper), Cardadon	10	14	—
6000	Mendip Hills (lead), near Bristol	3 1/2	14	—
5000	Merilyn (lead), Flint	2 1/2	7 1/2	7 1/2
1024	Mill Pool (tin and copper), St. Hilary	3 1/2	13	—
256	Mineral Court (tin), near St. Austell	9	9	—
380	Nansogellan (tin and copper), Camborne	3 1/2	30	—
900	Nantow (lead), Cardiganshire	2	1 1/2	—
3000	Nantow-Ger (copper), near Rhyader	2	1 1/2	—
2000	North Down (copper), Redruth	1 1/2	9	—
2000	North Levant (tin and copper), St. Just	1 1/2	7 1/2	—
1300	North Wh. Buller, or St. South Tolveg	6	7 1/2	—
150	Old Brimpt (tin), Lydford, Ashburton	2	8	—
1024	Pencraig (lead), Carnarvon	4	4 1/2	—

## MINES WHICH HAVE NOT SOLD ORES.

Shares.	Mines.	Paid.	Last Price.	Present Price.
1024	Appleford (silver-lead and cop.) St. Ives	3 1/2	11	—
3000	Beacon (tin), Roche, Cornwall	24	3 1/2	—
256	Beirrow (copper), Liskeard	24	1	—

Shares.		Paid.	Last Price.	Present Price.
8000	Bieton Consols, Linkinhorne	1	1	2 1/2
32	Black Burn, Alston, Cumberland	30	100	
6000	Bolton (lead), Menheniot	4 1/2	6 1/2	
812	Butterdon (lead), Menheniot	4 1/2	6 1/2	
1000	Cae Gwyn (silver-lead), Cardiganshire	1	3	
3000	Calley (copper and lead), Kirkcudbrightshire	1	1 1/2	
1168	Caradon Great Cons. (cop.), Linkinhorne	3 1/2	2	
1536	Caradon Wood (copper and lead), St. Ives	7 1/2	1	
5120	Caradon Vale (lead), Linkinhorne	1	2	
512	Caroline and Fanny Consols, St. Minver	3	34	
2000	Cassandra Anne (lead & cop.), Stoke Clim.	5	6 1/2	
2448	Castle Dinas (tin), St. Columb	1	1 1/2	
4527	Cofi Gwyn (silver-lead), Cardigan	21 1/2	4	
1024	Ciljiah and Wentworth (tin & co.), Redruth	2 1/2	4	2 1/2
1000	Cockley Beck (copper)	1	2	
311	Craddock Moor (copper), St. Cleer	31	8	
6000	Cwmdyke Rock and Green Lake (copper)	3	3 1/2	
2000	Cwm Seta	—	5	
5000	Devon Consols North (cop.), Lamerton	2 1/2	2 1/2	
3048	Devon Consols West (copper), Stoke Clim.	1 1/2	1	
758	Devon Great Tincoff, North Bovey	4	4	
1536	Duff of Cornwall (copper), St. Winnow	2	3 1/2	
1024	East Balesodden (tin), Llantrisant	2 1/2	1	
5000	East Bick (lead), Kirkcudbrightshire	1	1	
3048	East Boringdon Park, Plympton	1 1/2	2 1/2	
1024	East Buller (copper), near Redruth	3 1/2	3 1/2	3 3/2
138	East Carn Brea (copper), Redruth	4	2 1/2	
1100	East Frongoch (lead)	1 1/2	5	5
256	East Tolgus (copper), Redruth	8	8	
100	East Trevel	1	3 1/2	
1292	East Wheal Agar	6	6	
3048	East Wheal Josiah (copper), Tavistock	4	4	
3000	East Wheal Lashleigh, Llantrisant	1 1/2	1 1/2	
1000	East Wheal Reith, St. Ives	2 1/2	2 1/2	
4000	East Wheal Russell (copper), Tavistock	1 1/2	3 1/2	3
1024	Exmoor Eliza (copper), South Molton	4 1/2	3	
6000	Forest (copper and silver-lead), Devon	1 1/2	1	
1000	Freidilwyd Mines (lead), Wales	1 1/2	3 1/2	
256	Girdelirivn (silver-lead), Cardiganshire	1	8	
5000	Glyn Wheal Mary (copper), Cardingham	1 1/2	1 1/2	
1024	Great Bryn Consols (copper and tin)	9 1/2	3 1/2	
1024	Great Sheba Consols (tin and copper)	9 1/2	3 1/2	5
1024	Great Wheal Alfred (copper), Phillack	13	8	10 1/2 11
6000	Great Wheal Martha (cop.), Stoke Clim.	1	1 1/2	
512	Great Wheal Rough Tor Consols (copper)	29	15	
32	Helvelin Mining Company, Westmoreland	25	25	
1800	Hennock (silver-lead), Hennock	3 1/2	2 1/2 5 1/2	
10000	Ilbertian (copper) Ireland	12 1/2	1 1/2	
20000	Kenners and West of Ireland (copper)	1	1 1/2	
3300	Kilbricken (silver-lead), Clare, Ireland	3	2 1/2	
1024	Kingsmill and Bedford (lead and silver)	5	1 1/2	
1024	Lantlallack (silver-lead, &c.), Landraek	1	3	
5085	Lydford Consols (lead)	1	1 1/2	
3600	Llynvi Iron (iron)	50	50	
512	Melin Llyn Pair (silver-lead), Merioneth	4	8	
2000	Molland	1	1 1/2	
160	Morvah Consols (tin and copper)	2	1 1/2	
5000	New Copper Bottom (copper) Bridestow	1 1/2	1 1/2	
3048	New East Gwernvale (copper and tin)	1 1/2	1 1/2	
1024	North Buller (copper), Redruth	7	17	17
256	North Crenner (copper)	3	4	
256	North Fowey Consols (copper), Tyward	4 1/2	7 1/2	
8000	North Tamar (silver-lead & copper) Devon	2	3 1/2	
16000	North Trevelly (lead and copper)	2	3 1/2	2 3/2 4
1024	North Wh. Robert (copper), Walkhampton	3 1/2	1 1/2	
1060	North Wheal Trevelly (lead), Quethiock	11 1/2	2 1/2	
3048	Oke Tor (lead), Calstock	2	2 1/2	
256	Old Wheal Bassett (copper), Redruth	2	2 1/2	
406	Penhauger (lead), Menheniot	3	2 1/2	
1000	Penrall	1	2	
700	Pen-y-bank and Engloed (lead)	4 1/2	4	
1024	Præd 'nsols (tin), Towadnack	1 1/2	17 1/2	
6200	Silver Valley & Wh. Brothers (silv.-lead)	1	3 1/2	
1024	Sourton Consols	2 1/2	3 1/2	
3000	South Carn Brea (copper), Illogan	10	4	
1024	South Plain Wood (copper), Ashburton	5 1/2	6	
108	South Trevelly (copper), near Liskeard	37 1/2	2 1/2	
2000	South Wales Mining Company (copper)	1 1/2	3	
256	South Wheal Josiah (copper), Calstock	2	4	
2500	St. Agnes Beacon (tin and copper)	21 1/2	4	4
5000	Temple Consols (tin & copper) Cornwall	2	5	
3048	Trebell Consols (tin and copper), Lanivet	1 1/2	1 1/2	1 1/2
600	Tregadock (lead), St. Teath	1 1/2	10	
1024	Tremar (copper), Liskeard	3 1/2	2 1/2	
600	Treurtun Quarries	31 1/2	7	
512	Trevelly (lead), St. Cleer	13	7	7
512	Treville (lead), Llantrisant	5 1/2	5	
604	Trowan Consols (tin), Towednack	7	9	
4000	Tyn-y-Worgold (slate), near Carnarvon	4	4	
512	Tywardreath (copper), St. Blazey	8	12	12
1024	West Brea (tin), St. Austell	29 1/2 6 1/2	2 1/2	
5000	West Callington, copper	1	1 1/2	
5000	West Camborne (copper and tin)	2	70	
256	West Duncton (copper), Gwennap	2 1/2	2 1/2	
1024	West Downs (copper and tin), Whitechapel	7	8 1/2	
1024	West Phoenix, Linkinhorne	7	8 1/2	8 1/2
6500	West Polgoth (tin), St. Ewe & St. Mewan	1	1	1
256	West Sharp Tor (copper) Linkinhorne	22	49	
1110	West United Mills (copper), Illogan	4 1/2	2 1/2	
5000	West Wheal Alfred (copper) Hayle	1	1 1/2	
64	West Wheal Darlington (cop.), Ludgvan	45	45	
4900	West Wheal Friendship (copper), Devon	2	4	
2048	West Wheal Rose (lead)	2	3 1/2	
4000	West Wheal Russell, Tavistock	5	1 1/2	
1024	West Wheal Sheba	10 1/2	7	
300	Wheal Arthur (lead), near East Wh. Rose	17	49	
2500	Wheal Caradon (copper), St. Cleer	2	2	
256	Wheal Carpenter (tin), Gwinnar	1 1/2	2 1/2	
1024	Wh. Carpenter (lead & cop.) S. Sydenham	3	3	
1024	Wh. Catherine (silver-lead), Liskeard	2 1/2	3	
1024	Wh. Catriona (lead), Stewilly	2 1/2	7 1/2	
1024	Wh. Cupid (copper), Gwennap	2 1/2	7 1/2	
3000	Wh. Dora (tin and copper), St. Cleer	35	5 1/2	
4096	Wh. Edward (copper), Calstock	2	4	
1024	Wh. Emily (antimony and lead)	3	5	
1024	Wh. Emma	1	5	
1070	Wh. Enys (tin), Wendron	2 1/2	1 1/2	
5000	Wh. Fanny (lead)	—	3	
916	Wh. Fortrose (copper), Tavistock	5 1/2	2 1/2	
2048	Wh. Fortune (lead), Llanidulph	4 1/2	2	
1536	Wh. Gill (cop. and lead), Liskeard	4 1/2	2	3 3/2
2048	Wh. Hamlyn, near Oakhampton	1 1/2	1	
2048	Wh. Harris (lead), near Tavistock	3	1	
1000	Wh. Lemon, Germoe	4 1/2	2	
1024	Wh. Mary Ann (copper), Bridestow	—	2	
1024	Wh. Mary Emma East, Tavistock	1 1/2	6	
1024	Wh. Maudlin, Llanlivery	1	5	
1024	Wh. Mearns (copper), Perranuthnoe	13 1/2	10	
128	Wh. Pollard (copper), St. Cleer	4	3	
5000	Wh. Providence, South Sydenham	4	3	
2048	Wh. Robins	—	12	
10000	Wh. Samson, St. Teath	1	3 1/2	
512	Wh. Sophia (silver-lead), Lelant	8 1/2	5	
256	Wh. St. Agnes (tin), St. Agnes	2 1/2	2 1/2	
1000	Wh. Susan, Brea and Crowan	2 1/2	1 1/2	
1024	Wh. T. Sney	21	5	
2000	Wh. Ton (tin & copper), Stoke Clim.	5	7 1/2	
1024	Wh. Trevelack (copper), Strithians	6 1/2	5	
256	Wh. Tremaine (copper), St. Ervan	11	8 1/2	
1024	Wh. Venton (silver-lead), Liskeard	5 1/2	6	
4000	Wh. Victoria (copper)	—	2 1/2	
512	Wh. Violet (tin and cop.), St. Stephens	1 1/2	3 1/2	
4000	Wh. Williams (copper)	—	1	
2048	Wh. Wrey (lead), St. Ives, Liskeard	4	1 1/2	
3048	Wh. Mine (silver-lead), Beerferris	1	2	